UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
in cooperation with
STATE AGRICULTURAL EXPERIMENT STATIONS

COMPARISON OF WINTER WHEAT VARIETIES GROWN IN COOPERATIVE NURSERY EXPERIMENTS IN THE HARD RED WINTER WHEAT REGION IN 1988

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Lincoln, Nebraska
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UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
CENTRAL STATES AREA

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By

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REGIONAL NOTES

The 1988 Hard Red Winter Wheat Breeders field day was held on June 9th at the University of Nebraska Agronomy Farm in Lincoln, Nebraska. Cooperators also visited a Pioneer wheat nursery near Beatrice.

The 1989 Breeders Field Day is to be held at Stillwater, OK in late May.

The 18th Hard Red Winter Wheat Workers Conference was held on January 31 through February 2, 1989 at Dallas, Texas. Proceedings from the conference will be available in the near future through Dr. David Marshall, Texas A&M, Dallas.

Dr. Owen Merkle, Research Geneticist with the USDA/ARS at Stillwater, OK retired on December 31, 1988. Dr. Merkle accepted a position with MIAC Morocco project and is now stationed in Settat, Morocco as an Agronomist.

Dr. Kenneth Porter, Texas A&M Wheat Breeder stationed at Bushland, TX, retired in August of 1988. A replacement has not been named at this time.

Dr. A. D. Hewings was hired in 1988 by the USDA-ARS at Urbana, Illinois, replacing Dr. H. Jedlinski in small grains virology research efforts.

NOTE: The response reaction of entries to leaf and stem rust infection has been coded on a 1-9 scale to facilitate generation of this report. This same scale has been used in past reports. The response data can be interpreted as follows:

Response scale		Reaction type
1	-	VR
2	-	R
3	-	MR
4	-	M
5	-	M
6	-	M
7	-	MS
8	-	S
9	-	VS

NEW VARIETIES AND GERMPLASM

The following is only a partial list of new wheat varieties and germplasms available in the region. Included are those for which we have current information.

VARIETIES

The Kansas Agricultural Experiment Station and the USDA/ARS have announced the release of the hard red winter wheat variety 'Karl' (P.I. 527480). Karl was tested in the 1986 and 1987 SRPN as KS831374 and originates from the cross Plainsman V/3/Kaw/Atlas 50//Parker*5/Agent. Karl possesses excellent milling and baking qualities with grain protein concentrations approximately 1% higher than Eagle or 2% higher than Newton. Karl is resistant to soilborne mosaic and spindle streak mosaic viruses and provides excellent protection against leaf rust and tan spot.

The Colorado Agricultural Experiment Station has announced the release of the hard red winter wheat variety 'Lamar'. Lamar was tested in the 1987 and 1988 SRPN as CO820009 and originates from the cross 74F878/Wings//Vona. Lamar is a conventional medium height wheat with excellent quality. Lamar has shown significant tolerance to water stress and ability to fill grain under drought stress conditions. It is targeted for production in southeast Colorado.

Nickerson American Plant Breeders has announced the release of four winter wheat varieties:

'Bronco' is a hard red winter wheat derived from the cross Payne/W87-069. Bronco is a medium maturity, tall semidwarf with adaptation to the major wheat growing areas of Colorado, Kansas, Oklahoma, northern Texas, and southern Nebraska. Bronco was tested in the 1988 SRPN as NA-W83-256

'Rio Blanco' is a hard white winter wheat derived from the cross OK1125A/W76-1226. It is similar in many respects to its sister line Mesa but differs in that it is recessive for all three alleles for red seed coat. Rio Blanco is a medium maturity, short to intermediate height semidwarf with adaptation to the major wheat growing areas of Colorado, Kansas, Oklahoma, northern Texas, and southern Nebraska. Rio Blanco was tested in the 1988 SRPN as NA-W81-162W.

'Sierra' is a hard red winter wheat derived from the cross W79-227/Payne. Sierra is a medium maturity, intermediate height semidwarf with adaptation to Kansas, southern Nebraska, eastern Colorado, and the Oklahoma and Texas panhandle irrigated areas. Sierra was tested in the 1988 SRPN as NA-W84-229.

'Waco' is a hard red winter wheat derived from the cross W77-355/MN70113. Waco is a very early maturity, intermediate height semidwarf with primary adaptation to the north-central and northeastern portions of Texas. Waco was tested under the experimental designation W83-253.

1988
Southern Regional Performance Nursery

Entry No.	Variety or Pedigree	Sel. No.	Source
1**	Kharkof	CI1442	Check
2**	Scout 66	CI13996	"
3**	TAM-105	CI17826	"
4	Aurora/2*TAM W-101	OK84343	Oklahoma
5*	Payne*2/C0725052	OK84286	"
6*	" "	OK84287	"
7*	Hawk/OK80099	OK86197	"
8*	OK79257/Century Sib/2/Chisholm	OK86215	"
9	TAM W-101*4/Amigo*4//Largo	TXGH10989	Texas
10	Sturdy*3/Amigo	TX81V6582-2	"
11	TAM-105*4/Amigo*4//Largo	TXGH10563B	"
12	KS73146/TX71A1039	TX84V1336	"
13	TX71A562-6*4/Amigo*4//Largo	TXGH13622	"
14	TX71A374-4/TX71A1039-V1	TX84V1317	"
15	TX71A1039-V1*3/Amigo	TX81V6607-2	"
16*	TAM-106 resel./TX69D4819	TX84V1736	"
17*	TAM-108/Arkan	TX86A7041	"
18*	Rannaya/NE701136//CI13449/Ctk	TX86V1109	"
19*	" "	TX86V1110	"
20	74F878/Wings//Vona	C082009	Colorado
21	74cb462/Trapper//Vona	C0830027	"
22	C05926//7C/Tobari 63/3/Baca	C0830034	"
23*	74cb452/Vona//Baca	C0830014	"
24	Bison/Sterling//3*Scout/3/Eagle/4/ Pinnacle/2*Eagle	KS84HW196	Kansas
25	Bulk Selection	KS82C2338	"
26	KS73167/Agate//Sage sib	NE82533	Nebraska
27*	Wrr/Sut//MoW6811/3/Agate Sib/4/NE68457/Ctk78	NE84557	"
28*	CIMMYT/Scout//Bennett Sib/4/Parker*4/Agent //Belot.198/Lcr/3/Bez 1/Ctk78	NE83407	"
29***	Brule/3/Parker*4/Agent//Belot.198/Lcr	NE82656	"
30*	Winter Wheat Line	RL844677	Rohm & Haas
31*	Winter Wheat Line	RL845472	"
32*	HRW Selection	AGC-112	Seed Research
33*	" "	AGC-113	"
34	Bezostaya/TAM W-101//W558	XW141	Pioneer
35*	TAM W-101/W603//W558	XW161	"
36*	Winter Wheat Hybrid	XH675	HybriTech
37*	" "	XH685	"
38**	Bounty Hybrid Wheat	Bounty-122	Cargill
39*	" "	WH180001	"
40*	W79-227/Payne	NA-W84-229	NAPB
41*	Payne/W78-069	NA-W83-256	"
42*	OK11252A/W79-1226	NA-W81-162-W	"
43*	IL77-4259/IL76-3845	IL83-7439	Illinios
44*	TX69A330/IL76-3820	IL80-1251	"
45*	CHA Hybrid Mustang/3/T-105*4/Amigo*4//Largo, TXGH10287	TX87HA1	Texas

* New Entry in 1988, ** New Seed Provided, *** Entered from NRPN

TEST SITE INFORMATION - SRPN

Clovis, NM -- The dryland nursery was planted on 9/22/87 at a rate of 35 lbs/a. Fertilizer was applied preplant incorporated at a rate of 21 lbs/a nitrogen and 43 lbs/a phosphate.

The irrigated nursery was planted on 10/6/87 at a rate of 70 lbs/a. Fertilizer was applied preplant incorporated at a rate of 129 lbs/a nitrogen and 43 lbs/a phosphate.

Precipitation for August and September was above normal with 9.95 inches occurring in August. The following six months received below normal precipitation totaling only 2.03 inches. Harvest was delayed due to heavy rains in May and June (17.46 inches).

An infestation of Russian wheat aphid reached economic threshold levels by April 11, 1988. An application of 0.5 lbs/a a.i. Dimethoate was used to control the aphid. Leaf rust did not appear until hard dough stage and occurred at higher levels on the irrigated nursery. It did not, however, seem to affect yields. No other diseases were detected during the growing season.

Farmington, NM -- The nursery was sprayed two times in fall and spring for Russian wheat aphid control.

Bushland, TX -- The irrigated nursery was fertilized on 9/28/87 with 155 lbs/a N ammonium sulfate and sown on 10/20/87 at 65 lbs/a or 73 kg/ha. It was irrigated with 3.5 acre inches on 4/12/88, 5/2/88, and 5/18/88 followed by 2.39 inches of rainfall on 5/31/88. The low test weight of entries was not well explained. Failure to control Russian aphids late in the fruiting period may have been a contributing factor. Yellowing of some entries at heading suggested barley yellow dwarf infection but wheat streak or other viruses could be involved. Symptoms were not definitive.

The dryland nursery was sown on 10/6/88 at 32 lbs/a or 36 kg/ha. The nursery was ground sprayed with 1/3 oz/a Glean on 3/21/88 to control weeds. It was not fertilized. September rainfall was more than twice normal and December precipitation in the form of snow was almost three times normal. January through March was slightly below normal precipitation while April and May was 2.25 inches above normal.

Both nurseries were airplane sprayed with 1/2 lb/a Dimethoate for Russian aphid and greenbug control on 3/19/88 and 4/12/88.

Chillicothe, TX -- No information.

Dallas, TX -- A total of 100/46/0 lbs/a fertilizer (N/P/K) was applied. Emergence was delayed about 10 days due to dry conditions. There was good moisture from January through March with essentially no rains during April or May. Conditions were good for development with the highest yields in the Central Texas Blacklands in the past ten years and disease severities were relatively low.

Stillwater, OK -- There were near adequate soil moisture levels and mild temperatures throughout most of the season and no significant freeze damage. A uniform infection of barley yellow dwarf virus probably caused yield reductions in susceptible cultivars.

Lahoma, OK -- Temperatures were mild and soil moisture was adequate through most of the season. There was no significant disease or insect damage and no freeze damage.

Altus, OK -- Temperatures were mild and soil moisture better than average through most of the season for this location. A heavy leaf rust infection was present on susceptible cultivars. There was no significant freeze damage.

Goodwell, OK -- The nursery was pre-irrigated on 9/23/87 and irrigated on 3/23/88 and 5/10/88. Temperatures were mild throughout most of the season. There was no significant disease or insect damage and no freeze damage.

Hutchinson, KS -- The nursery was completely wiped out by wheat streak mosaic virus. Performance is an indication of tolerance to this disease.

Manhattan, KS -- Relatively good conditions and timely rains provided better than expected yields. A late, heavy infection of leaf rust influenced filling and reduced yields of susceptible cultivars.

Hays, KS -- Soil conditions in the fall were dry, however within three days of planting the nursery received 0.35 inches of rain which allowed for fairly uniform stands. Fall and winter growth was very limited. Winter survival was good. The nursery received 1.35 inches of rain on April 1, but no additional effective rainfall was received. Flowering dates were about average for the area but hot, dry conditions resulted in an early harvest date. Diseases and insects were not a factor in this test.

Garden City, KS -- The growing season ranged from normal to dry conditions. There was no disease pressure other than wheat streak mosaic virus and a late minor infection of leaf rust. Wheat streak mosaic virus adversely affected yields.

Colby, KS -- The nursery was abandoned due to poor stands. Planting conditions were very dry.

Ft. Collins, CO -- Nursery abandoned due to poor stand establishment.

Akron, CO -- No information.

Burlington, CO -- No information.

Walsh, CO -- Nursery abandoned due to hail damage.

Julesburg, CO -- No information.

Lincoln, NE -- The nursery was planted at a near optimal date with adequate fall and spring moisture. Winterkilling was a minor problem. Despite a generally dry and hot early summer, timely rains prevented drought stress. Leaf rust was prevalent.

Clay Center, NE -- The nursery was planted at a near optimal date with adequate fall and spring moisture. Winterkilling was a minor problem. Severe drought and heat during grain filling limited yields.

North Platte, NE -- The nursery was planted at a near optimal date with below adequate fall moisture. Winterkilling was a minor problem. Stands were very irregular with plot border rows failing to emerge as well as the center rows. Early spring moisture was ideal for the spread of Cephalosporium stripe which differentially affected the cultivars. Grain filling was abruptly ended by heat and wind with some lines dying green. Data are not reported due to variability in emergence.

Sidney, NE -- The nursery was abandoned due to hail.

Alliance, NE -- The nursery was planted at a near optimal date with adequate fall and spring moisture. Winterkilling was a minor problem. Adequate moisture was present during grain filling. A fertility gradient was present in the field which increased plot variability.

Brookings, SD -- The nursery was seeded on 9/11/87 into good moisture. Flax was planted as a snow-catch crop. A mild winter with adequate snow cover allowed 100% survival. An early, hot, dry spring and summer reduced yield potential. No disease or insect problems. Harvested on 7/5/88.

Presho, SD -- Seeded on 9/8/87 into fallowed ground with adequate moisture. A mild winter allowed for 100% survival. There were heavy fall infestations of wheat curl mite and R. Padi. The spring and summer were extremely hot and dry. WSMV and BYDV were very evident. Notes were taken on general plant appearance. Harvested on 7/6/88.

Casselton, ND -- The nursery was planted on 9/9/87. Less than 50% winter survival was recorded for most plots. Dry conditions were experienced from planting through harvest with less than 40% of normal precipitation received from April through July.

Columbia, MO -- No information.

Ames, IA -- The nursery was planted on 9/23/87 and emerged on 9/30/87. Fall moisture and growth was adequate. There was heavy winterkill on non-hardy cultivars. A dry spring and high temperatures in the early summer shortened plant growth. Plants ripened about 10 days ahead of normal with very little disease evident. Grain was bright, clean, and reasonably plump. Yields were fairly good despite low moisture and rapid growth.

Urbana, IL -- Soil moisture was good at planting and fall stands were excellent. Winter temperatures were fairly mild with snow cover during part of the winter. Most plots had excellent stands in the spring. Rainfall from January through harvest was below normal. Conditions became progressively drier throughout the season and diseases did not develop.

Lind, WA -- The fall was very dry with poor moisture conditions and poor emergence. The winter was mild with little moisture. Spring conditions were cool and moist with above normal precipitation in March, April and May.

Aberdeen, ID -- A total of 200 lb/a N and 40 lbs/a P were applied to the nursery. There were low levels of rainfall and snowfall for the crop season and hot summer temperatures. A total of 190 mm irrigation was applied. A slight leaf rust infection occurred late in the season. Planted on 9/25/87 and harvested 8/19/88.

Table 1. Yield and agronomic data for 45 entries in the Southern Regional Performance Nursery in 1988.

CLOVIS (IRR.)

NEW MEXICO

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	LEAF RUST SEV. %	LEAF RUST RESP. 0-9
TXGH13622	13	7176	71.5	80	134	9	
TXGH10563B	11	7081	70.3	80	130	7	
AGC-112	32	6835	68.9	82	131	4	
CI17826	3	6348	69.6	79	133	8	
OK84286	5	6326	69.1	83	134	10	
XH675	36	5940	68.5	86	135	4	
RL844677	30	5880	72	83	137	4	
OK84287	6	5858	69.1	79	133	7	
CO830027	21	5841	70.6	86	134	10	
TXGH10989	9	5762	68.8	77	133	7	
TX84V1317	14	5739	71	78	131	4	
XW161	35	5691	67	72	130	2	
WH180001	39	5640	68.3	81	134	4	
OK84343	4	5625	68.8	75	134	1	
TX84V1336	12	5617	68.8	79	130	4	
NE84557	27	5536	71	79	137	15	
OK86215	8	5483	71.3	82	131	4	
OK86197	7	5471	67.7	82	130	4	
TX86V1110	19	5442	66.8	87	133	1	
CO830014	23	5420	71	89	135	9	
Bounty-122	38	5419	65.2	83	134	12	
NA-W84-229	40	5389	68.5	77	135	2	
TX87HA1	45	5331	70.5	79	132	15	
NA-W83-256	41	5323	68.3	79	136	4	
KS82C2338	25	5248	71.1	75	130	5	
CO830034	22	5236	70.3	80	137	5	
TX84V1736	16	5139	69.2	74	130	7	
NA-W81-162-W	42	5098	69.2	77	133	4	
IL80-1251	44	5095	69.3	77	137	4	
XH685	37	5042	67.2	83	134	2	
CI13996	2	4907	69.4	87	134	8	
TX81V6607-2	15	4870	71.9	72	131	1	
NE82533	26	4756	69.8	78	137	4	
NE82656	29	4722	64.9	77	137	1	
TX86V1109	18	4585	67.4	83	134	2	
TX81V6582-2	10	4506	70.4	69	130	5	
NE83407	28	4432	65.2	76	137	4	
TX86A7041	17	4407	65	72	135	1	
XW141	34	4387	66	71	136	1	
RL845472	31	4122	67.9	90	138	4	
AGC-113	33	3985	64.4	77	137	5	
KS84HW196	24	3911	70.1	76	130	1	
CI1442	1	3833	69.3	96	144	5	
CO82009	20	3775	69.2	82	137	13	
IL83-7439	43	3765	66.1	79	136	2	
MEAN		5244					
LSD(.05)		1202					
C.V.		14.0					

CLOVIS (DRYL.)

NEW MEXICO

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	LEAF RUST SEV. %	LEAF RUST RESP. 0-9
TXGH10563B	11	3257	73.9	64	125	27	
TX87HA1	45	2970	75.7	68	129	27	
TXGH13622	13	2922	73.7	57	130	4	
CI17826	3	2666	72.1	64	127	23	
CI13996	2	2567	72.2	71	130	1	
XH675	36	2456	71.3	64	130	2	
RL845472	31	2338	73	65	129	2	
OK84287	6	2265	71.3	60	129	4	
TXGH10989	9	2170	70.6	60	129	9	
TX84V1336	12	2069	72.9	56	125	1	
AGC-112	32	2044	72.8	58	128	22	
TX84V1317	14	2033	72.4	56	129	1	
IL80-1251	44	1994	72.4	59	130	2	
TX81V6607-2	15	1980	75.5	57	128	5	
C0830014	23	1945	73.6	64	130	7	
C082009	20	1849	73.4	63	134	7	
OK84286	5	1743	71.3	57	130	1	
TX86A7041	17	1728	66.5	59	130	1	
TX84V1736	16	1700	71.9	54	125	4	
OK86215	8	1677	71.8	59	128	5	
OK84343	4	1629	69.9	57	130	4	
TX86V1109	18	1601	68	69	129	1	
TX81V6582-2	10	1579	72.2	57	126	7	
NA-W83-256	41	1578	69.9	59	131	2	
TX86V1110	19	1538	66.6	67	129	11	
WH180001	39	1531	69.3	62	131	7	
C0830027	21	1521	72.2	58	129	2	
XH685	37	1483	71.1	59	130	4	
KS84HW196	24	1455	72.1	57	127	1	
NE84557	27	1414	72.6	56	131	1	
C0830034	22	1384	72.7	58	134	14	
NA-W81-162-W	42	1346	69.9	53	130	2	
RL844677	30	1342	72	59	135	1	
OK86197	7	1198	69.4	56	129	1	
Bounty-122	38	1146	67.4	55	130	7	
CI1442	1	1126	65.9	76	144	14	
NA-W84-229	40	1113	70	48	131	1	
KS82C2338	25	1110	70.7	58	129	14	
NE83407	28	974	67.5	52	135	2	
NE82656	29	973	68.2	58	134	4	
IL83-7439	43	871	67.6	58	130	1	
AGC-113	33	868	66.2	58	135	4	
NE82533	26	831	69.1	55	133	11	
XW141	34	697	61.4	53	133	1	
XW161	35	678	67.2	49	123	1	
MEAN		1675					
LSD(.05)		987					
C.V.		36.1					

FARMINGTON

NEW MEXICO

FOUR REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1
TX86A7041	17	8006	75.8	90	139
XH685	37	7141	77.4	102	137
AGC-113	33	7038	75.1	100	139
NA-W84-229	40	6965	77.7	85	137
XH675	36	6950	77.7	99	136
RL844677	30	6833	78	105	139
C0830027	21	6789	79	99	136
C0830034	22	6745	79	103	137
TX84V1336	12	6569	77.4	84	133
XW141	34	6510	77.1	85	137
CI17826	3	6349	76.4	91	135
TXGH10563B	11	6334	74.8	92	134
C082009	20	6334	79	101	139
TX81V6607-2	15	6305	77.1	81	135
TX84V1317	14	6217	77.7	83	133
IL80-1251	44	6070	76.1	91	135
Bounty-122	38	6056	75.1	91	135
TX81V6582-2	10	5938	79.3	77	132
WH180001	39	5938	75.8	93	135
NA-W83-256	41	5909	75.1	92	139
AGC-112	32	5821	75.1	89	136
NE82656	29	5806	72.9	98	137
NE82533	26	5718	78.4	100	136
TXGH13622	13	5630	74.8	89	137
XW161	35	5630	74.5	69	132
NA-W81-162-W	42	5586	76.8	84	135
NE84557	27	5440	77.1	100	136
TX87HA1	45	5381	73.5	95	135
CI1442	1	5322	76.4	126	143
OK84287	6	5249	76.8	90	138
IL83-7439	43	5220	75.5	98	135
TX86V1109	18	5191	74.5	93	135
TX86V1110	19	5147	75.5	90	134
KS82C2338	25	5147	79	90	133
OK84286	5	5117	76.4	92	138
OK86215	8	5117	74.8	89	134
OK84343	4	5088	74.2	84	132
NE83407	28	5073	72.6	86	137
TX84V1736	16	5059	77.1	77	133
RL845472	31	5015	76.4	92	138
TXGH10989	9	5000	75.1	81	133
C0830014	23	4795	75.1	110	136
OK86197	7	4560	73.9	87	133
CI13996	2	4311	75.8	105	133
KS84HW196	24	3739	71.3	84	132
MEAN		5781			
LSD(.05)		1255			
C.V.		15.5			

BUSHLAND (IRR.)

TEXAS

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	LODGING %	YELLOW INDEX 0-9
TX81V6607-2	15	6226	74.2	82	130	27	1
TX81V6582-2	10	5984	73.5	85	128	30	1
TX84V1336	12	5661	71.2	87	130	27	2
TXGH105638	11	5502	68.1	89	129	35	1
XW161	35	5360	70.1	85	127	0	3
TX87HA1	45	5273	69.9	88	132	10	3
TX84V1736	16	5183	71.1	83	128	37	3
AGC-112	32	5142	66.3	82	130	38	1
TX84V1317	14	5107	71.2	82	130	18	3
TXGH13622	13	5102	69.6	90	132	57	2
OK84343	4	4974	72.1	88	133	2	2
XH675	36	4922	69.6	92	133	13	1
OK84286	5	4887	69.7	89	133	18	3
OK86215	8	4878	70.8	87	131	22	3
NA-W84-229	40	4781	69.6	86	133	0	3
C0830027	21	4779	73.7	92	131	40	2
TXGH10989	9	4757	70.1	88	130	55	1
OK84287	6	4711	69.2	90	133	13	3
KS82C2338	25	4694	70.7	88	131	12	3
XH685	37	4649	68.5	87	133	13	2
Bounty-122	38	4642	65	91	133	8	2
NA-W81-162-W	42	4487	68.7	81	133	7	3
WH180001	39	4407	68.5	94	134	15	4
IL80-1251	44	4400	68.5	89	135	10	4
KS84HW196	24	4389	72	82	129	53	4
XW141	34	4344	65.6	82	133	5	1
OK86197	7	4341	70.7	90	131	62	2
RL845472	31	4297	71.6	86	134	23	2
NA-W83-256	41	4220	68.3	87	[illegible]	[illegible]	[illegible]
TX86A7041	17	4142	64.5	74			
CI17826	3	4097	65.6	88			
TX86V1109	18	4072	70.3	88			
TX86V1110	19	4048	69.2	90			
NE82656	29	4036	66.8	90			
NE83407	28	4014	64.1	85			
RL844677	30	4009	69.2	93			
C0830034	22	3902	67.6	92			
IL83-7439	43	3823	69	91			
NE84557	27	3249	71.2	[illegible]			
C0830014	23	3210	70.5	[illegible]			
C082009	20	3152	68.9	[illegible]			
NE82533	26	3045	69.4	91	136	5	3
AGC-113	33	2966	61.8	89	136	30	2
CI13996	2	2870	70.8	92	134	73	4
CI1442	1	1734	68	95	142	68	3
MEAN		4410					
LSD(.05)		500					
C.V.		6.9					

BUSHLAND (DRYL.)

TEXAS

FOUR REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	YELLOW INDEX 0-9
TX81V6607-2	15	3685	82.6	62	128	2
TX81V6582-2	10	3373	81.1	61	127	2
TXGH13622	13	3160	79.2	62	129	2
TX84V1336	12	3157	79.6	62	128	3
TXGH10563B	11	3039	78.1	65	127	2
AGC-112	32	3014	79.1	64	127	2
TX84V1317	14	2977	80.2	63	127	4
TXGH10989	9	2861	79.1	64	128	1
C0830034	22	2857	78.7	70	132	4
C0830027	21	2839	80.4	75	130	2
CI17826	3	2835	78.7	66	129	2
OK84286	5	2825	78.6	63	130	1
TX87HA1	45	2825	77.8	63	128	2
TX84V1736	16	2740	77.8	62	127	2
OK84287	6	2677	78.8	63	130	1
OK86215	8	2672	78.2	65	128	2
XH675	36	2650	76.6	71	131	3
XH685	37	2637	76.5	68	131	3
RL845472	31	2570	79.9	67	131	3
OK86197	7	2460	77.5	64	127	3
RL844677	30	2449	78.8	68	133	4
AGC-113	33	2435	75.7	66	133	3
NE84557	27	2402	79	67	134	5
NA-W83-256	41	2369	77.8	63	131	2
KS82C2338	25	2361	79.9	65	128	3
IL80-1251	44	2349	77.2	64	133	4
NA-W81-162-W	42	2329	78.1	61	130	3
TX86V1110	19	2326	76.1	71	128	4
KS84HW196	24	2321	79	65	127	4
TX86A7041	17	2319	76.1	57	133	4
OK84343	4	2260	76.8	62	130	3
C082009	20	2114	79.1	67	134	4
TX86V1109	18	2063	76.6	60	129	4
NE83407	28	2043	73.8	57	134	4
WH180001	39	2031	77.2	63	131	3
CI13996	2	1987	79	75	132	5
Bounty-122	38	1972	76.8	64	132	4
XW161	35	1950	77.4	56	127	4
C0830014	23	1949	78.6	71	131	6
NA-W84-229	40	1927	76.9	52	132	5
XW141	34	1875	76.2	51	132	3
NE82533	26	1841	76.9	66	134	4
NE82656	29	1589	75.6	64	134	4
IL83-7439	43	1541	76.5	58	132	6
CI1442	1	1017	72.3	66	138	5
MEAN		2437				
LSD(.05)		475				
C.V.		13.9				

CHILLICOTHE

TEXAS

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1
TX81V6607-2	15	4741	84.2	70	109
RL844677	30	4730	81.1	82	112
XW161	35	4723	82.8	70	106
CO830027	21	4656	82.5	86	111
TXGH13622	13	4580	82.8	79	110
TX87HA1	45	4557	80.8	81	109
NA-W81-162-W	42	4542	81.3	74	111
CO830014	23	4506	81.7	89	110
TXGH10563B	11	4492	80.2	71	107
TX86V1110	19	4398	80.4	88	110
TX84V1317	14	4389	81.2	73	110
NE83407	28	4317	76	78	116
TX81V6582-2	10	4311	82.9	70	106
TX84V1336	12	4311	81.5	69	108
IL80-1251	44	4270	78.2	82	118
NE84557	27	4235	81.9	93	119
XW141	34	4201	80.4	76	112
NE82656	29	4176	77.9	83	116
RL845472	31	4176	80.9	88	115
TX84V1736	16	4165	80.9	67	106
TX86A7041	17	4152	76.2	74	112
TXGH10989	9	4147	79.5	78	111
CO830034	22	4140	80.4	92	115
TX86V1109	18	4131	80.6	92	110
Bounty-122	38	4122	79.8	73	109
WH180001	39	4122	79.7	83	114
NE82533	26	4120	80.4	84	117
AGC-113	33	4096	76.6	82	118
XH675	36	4084	79.7	80	111
KS82C2338	25	4075	82.8	77	106
XH685	37	4069	79.7	83	111
NA-W83-256	41	4066	77.1	74	112
AGC-112	32	4060	78.5	75	108
OK86215	8	4046	81.3	76	106
OK84343	4	4013	79.9	75	112
NA-W84-229	40	4001	79.9	71	112
OK84286	5	3974	80.5	73	110
OK84287	6	3797	80.4	76	111
CI13996	2	3762	79.1	101	116
IL83-7439	43	3757	80	80	116
CI17826	3	3717	75.5	77	112
OK86197	7	3670	80.7	78	109
CO82009	20	3654	80.7	92	117
KS84HW196	24	3237	81.5	75	112
CI1442	1	2849	77.3	96	127
MEAN		4141			
LSD(.05)		532			
C.V.		7.9			

DALLAS, TEXAS -- THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	LEAF RUST SEV. %	LEAF RUST RESP. 0-9	MILDEW %	SEPTORIA 0-9	BYD VIRUS 0-5
XH675	36	4222	76.7	79	108	5	8	0	6	1
TX86A7041	17	4192	73.2	74	110	5	7	0	6	0.5
Bounty-122	38	4190	73.6	76	104	10	8	50	7	2
NA-W83-256	41	4094	75.4	79	109	15	8	60	6	1
TX84V1736	16	4081	77.7	69	101	5	8	0	6	1
XW161	35	3984	76.3	64	104	0	.	20	6	2
TXGH13622	13	3973	76.1	79	108	30	8	0	7	1
TX84V1336	12	3933	76.7	76	109	15	7	5	7	2
XH685	37	3924	75.8	81	108	1	7	50	7	2
OK86215	8	3907	77.1	71	103	5	8	0	7	1
OK86197	7	3905	76	76	108	15	8	40	6	0.5
NA-W81-162-W	42	3791	76.8	71	110	1	8	60	6	2
CO830027	21	3775	77.5	84	110	30	8	0	7	1
RL844677	30	3770	77.1	84	109	1	8	0	6	1
TX86V1109	18	3757	75.3	86	105	5	8	10	6	1.5
OK84286	5	3714	77.1	71	104	1	7	60	6	1
TX87HA1	45	3702	75.7	76	106	40	8	0	6	1.5
TXGH10563B	11	3630	74.8	79	107	15	8	0	6	2
TX81V6607-2	15	3560	78.9	71	110	5	8	0	6	2.5
AGC-113	33	3494	73.3	76	113	10	8	0	7	3
TX84V1317	14	3474	76.3	71	109	5	7	5	7	2.5
TXGH10989	9	3471	71.7	79	113	5	8	0	5	2
CO830014	23	3465	76.1	94	108	35	8	0	6	2
OK84287	6	3420	78.2	71	105	1	7	0	6	1
OK84343	4	3409	75.4	71	118	1	7	0	6	0.5
NE83407	28	3396	73.4	71	113	5	8	0	6	2.5
AGC-112	32	3395	74.6	74	108	30	8	0	7	1
NE82656	29	3354	73.7	76	121	0	.	0	6	3
CO830034	22	3326	75.4	89	114	25	8	0	7	1
TX86V1110	19	3303	74.2	81	104	5	8	5	7	2.5
KS82C2338	25	3298	76.6	79	113	25	8	0	6	2
RL845472	31	3297	76.8	81	115	0	.	0	6	1
NE82533	26	3294	77.8	74	120	5	8	0	6	3.5
NE84557	27	3177	76.8	89	119	0	.	0	7	2
KS84HW196	24	3171	76.7	74	114	15	8	0	8	2
NA-W84-229	40	3170	75.9	69	112	10	8	50	6	3.5
IL80-1251	44	3136	75.2	79	115	1	8	0	6	2
TX81V6582-2	10	3115	80.1	69	107	15	8	0	5	2
WH180001	39	3113	74.5	79	121	15	8	0	5	3
IL83-7439	43	3078	74.6	79	114	5	8	0	6	3
CI13996	2	2910	76.8	91	120	35	8	5	6	2.5
CI17826	3	2770	73.3	71	117	20	8	25	7	2.5
XW141	34	2699	71.3	69	112	10	8	0	6	4
CO82009	20	2565	77	81	120	15	8	0	7	2
CI1442	1	1343	75.4	102	127	35	8	10	6	3
MEAN		3461								
LSD(.05)		442								

STILLWATER

OKLAHOMA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	BYD VIRUS 0-9
TX81V6607-2	15	4089	78.7	81	119	4
OK84343	4	4083	79.5	85	124	4
TX84V1317	14	4001	79.1	81	121	7
OK84287	6	3976	80	89	120	3
RL844677	30	3960	81.3	97	122	6
TXGH10989	9	3868	76.8	87	120	4
C0830034	22	3861	79.9	100	123	5
OK84286	5	3843	80	86	120	5
XW161	35	3814	79.1	78	117	3
WH180001	39	3784	78	98	125	5
TX84V1736	16	3780	77.4	82	118	6
AGC-113	33	3768	77.1	84	125	5
TX84V1336	12	3752	74.3	86	118	6
XH685	37	3744	77.4	94	121	5
OK86215	8	3730	77.5	84	118	5
XH675	36	3691	77.7	97	121	4
TX86A7041	17	3608	77	82	125	6
TX81V6582-2	10	3587	78.7	78	117	6
IL80-1251	44	3574	78	81	127	6
C0830027	21	3571	80.1	96	121	6
TXGH13622	13	3540	77.1	91	119	4
OK86197	7	3510	76.1	93	119	5
NE83407	28	3497	78.9	82	124	4
TX87HA1	45	3427	76.5	90	120	6
Bounty-122	38	3423	76	90	120	5
NA-W81-162-W	42	3336	79.3	83	122	6
KS82C2338	25	3316	78.7	88	118	6
NE84557	27	3289	82	94	127	6
TXGH10563B	11	3258	74.2	88	117	6
NE82656	29	3251	78.2	79	127	6
NA-W84-229	40	3208	77.5	80	123	7
KS84HW196	24	3199	78.3	83	122	6
IL83-7439	43	3124	79.5			
C082009	20	3070	81.8			
TX86V1109	18	3058	76.9			
TX86V1110	19	3036	75.7			
NA-W83-256	41	3029	79.6			
CI17826	3	2937	74.9			
AGC-112	32	2787	75.2			
CI13996	2	2692	79.3			
RL845472	31	2651	79.3			
C0830014	23	2475	78.2			
NE82533	26	2231	78.8			
CI1442	1	1779	79.1			
XW141	34	1766	76.4			
MEAN		3355				
LSD(.05)		359				
C.V.		6.5				

LAHOMA

OKLAHOMA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	LODGING %
XW161	35	5482	78	93	0
OK84343	4	5351	77.8	92	0
TX84V1336	12	5217	77.3	91	3
TX81V6607-2	15	5115	81	91	5
TX84V1317	14	5064	78.9	88	20
OK86215	8	4987	77.5	94	0
TX84V1736	16	4946	78.4	88	23
XH685	37	4899	75.7	105	0
NA-W84-229	40	4847	75.3	92	0
TX86A7041	17	4813	73.8	92	0
RL844677	30	4763	77	104	0
TX81V6582-2	10	4760	78.8	85	2
OK84286	5	4743	79.5	98	0
TX86V1110	19	4740	76.9	106	27
NA-W81-162-W	42	4729	77.7	91	0
OK84287	6	4704	79.1	98	0
KS82C2338	25	4659	79.2	95	0
WH180001	39	4578	74.3	102	0
C0830027	21	4526	79.5	103	25
TXGH10989	9	4478	76.5	93	32
TX86V1109	18	4388	77.4	104	27
IL80-1251	44	4374	72.9	95	0
XH675	36	4363	75.6	104	0
AGC-112	32	4324	75.1	91	0
NE82656	29	4318	74.4	94	0
RL845472	31	4286	77.8	101	0
TXGH10563B	11	4218	75.9	99	0
NE83407	28	4195	75.6	98	0
Bounty-122	38	4186	74	94	0
TX87HA1	45	4177	76.2	103	0
XW141	34	4166	72	89	0
NA-W83-256	41	4143	74.3	101	2
C0830014	23	4080	78.7	117	0
OK86197	7	4064	76.5	103	15
TXGH13622	13	3961	76.9	95	5
KS84HW196	24	3956	78.9	97	10
NE84557	27	3927	80.5	104	2
CI17826	3	3816	75.1	99	0
C0830034	22	3784	77.1	106	10
IL83-7439	43	3617	78.2	115	13
C082009	20	3560	78.3	109	5
AGC-113	33	3474	71.9	95	25
CI13996	2	3458	78.7	110	10
NE82533	26	3314	76.2	94	0
CI1442	1	1770	76.8	106	27
MEAN		4340			
LSD(.05)		364			
C.V.		5.1			

ALTUS

OKLAHOMA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM
OK84343	4	4086	79.9	83
XW161	35	4049	79.3	74
WH180001	39	3564	75.1	97
XH685	37	3547	75.1	99
NA-W81-162-W	42	3536	75.9	77
TX86V1110	19	3508	75.7	91
TX84V1336	12	3501	79.3	75
XW141	34	3501	74	81
TX86V1109	18	3497	76.4	94
TX84V1317	14	3488	80.9	74
NE83407	28	3444	74	83
TX86A7041	17	3432	73.1	85
NE82656	29	3415	74.6	89
RL844677	30	3378	74.8	99
XH675	36	3371	75.7	97
OK84287	6	3363	80.5	83
OK84286	5	3326	80.5	82
NA-W83-256	41	3296	73.9	87
Bounty-122	38	3290	74.8	86
NA-W84-229	40	3289	78.3	85
AGC-112	32	3277	73.8	84
TX87HA1	45	3270	75.6	86
TXGH10989	9	3266	76.9	84
TX84V1736	16	3259	79.2	79
RL845472	31	3235	78.3	94
IL83-7439	43	3222	77.9	96
IL80-1251	44	3189	76.1	90
TX81V6582-2	10	3160	80.2	76
TX81V6607-2	15	3158	82.8	75
OK86197	7	3143	78.4	84
TXGH10563B	11	3137	75.6	78
KS82C233B	25	3106	79.5	86
OK86215	8	3100	78.7	83
AGC-113	33	3096	73.3	90
KS84HW196	24	3081	79.2	82
NE84557	27	3020	77.1	97
TXGH13622	13	3019	78.6	80
C0830014	23	2973	78.2	99
CI17826	3	2897	75.3	84
CI13996	2	2842	77.9	105
C0830034	22	2820	76.6	96
C0830027	21	2798	79.6	93
NE82533	26	2554	77.8	91
C082009	20	2472	76.6	99
CI1442	1	1680	78.3	98
MEAN		3215		
LSD(.05)		375		
C.V.		7.1		

GOODWELL

OKLAHOMA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1
OK84286	5	5098	75.3	102	133
XW161	35	4805	74.6	86	132
OK86215	8	4785	74.2	97	133
OK84287	6	4708	74.2	102	134
XW141	34	4699	70.4	89	134
OK84343	4	4664	73.9	98	135
TX81V6582-2	10	4657	76.2	89	132
TX84V1317	14	4441	73.9	91	133
TXGH10563B	11	4413	71.1	102	132
TX84V1736	16	4403	73	91	133
RL845472	31	4362	74.4	109	136
NA-W83-256	41	4354	69	99	136
TX84V1336	12	4346	72.4	99	133
XH675	36	4292	71.2	108	133
NA-W81-162-W	42	4263	72	93	135
AGC-112	32	4207	69.5	99	133
TX81V6607-2	15	4176	75.5	92	133
IL80-1251	44	4176	68.5	104	136
TX87HA1	45	4135	70.8	104	133
TX86A7041	17	4134	67.7	95	136
OK86197	7	4122	73.8	104	133
NE82656	29	4113	69.8	107	137
XH685	37	4092	72	109	133
KS82C2338	25	4091	74.8	100	133
TXGH10989	9	4020	71	97	134
WH180001	39	4013	68.8	107	135
NE83407	28	3953	67.9	101	137
TX86V1110	19	3952	71.1	99	133
NA-W84-229	40	3922	69.9	101	135
RL844677	30	3913	72.1	110	136
NE84557	27	3887	74.7	106	138
TX86V1109	18	3873	73	101	133
Bounty-122	38	3864	68	103	135
AGC-113	33	3808	66.6	106	137
KS84HW196	24	3802	75.6	100	133
CO830027	21	3790	73.1	108	133
IL83-7439	43	3697	73.8	107	135
TXGH13622	13	3684	72.4	99	133
NE82533	26	3593	72.1	107	138
CI13996	2	3575	75.6	104	136
CO830014	23	3553	73.8	114	135
CO82009	20	3504	72.8	104	137
CI17826	3	3436	69.3	102	133
CO830034	22	3392	70.6	107	137
CI1442	1	2592	71.7	115	140
MEAN		4075			
LSD(.05)		555			
C.V.		8.3			

HUTCHINSON

KANSAS

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1
TX81V6582-2	10	2979	66.7	74	137
XW161	35	2511	63.3	75	135
TX81V6607-2	15	2499	68.2	75	136
AGC-112	32	2273	61.9	80	136
TX87HA1	45	2247	61.8	84	136
OK86215	8	2130	63.1	78	133
TXGH10563B	11	2106	60	80	135
OK86197	7	2082	63.6	75	133
KS82C2338	25	2011	67.1	75	135
TXGH10989	9	2003	59.7	76	135
TXGH13622	13	1945	62.8	78	136
TX86V1109	18	1929	61.3	81	135
TX84V1736	16	1820	60.4	70	135
XH675	36	1804	59	79	137
OK84343	4	1802	62.7	77	131
OK84286	5	1727	59.1	75	132
NE82656	29	1678	58.6	74	135
RL844677	30	1647	59.5	79	135
TX86V1110	19	1642	58.4	78	134
TX84V1336	12	1607	62.2	75	133
XW141	34	1580	53.5	72	135
KS84HW196	24	1578	63.3	72	137
IL80-1251	44	1559	53.9	75	135
C0830027	21	1545	61.9	82	135
TX84V1317	14	1508	60.2	77	137
XH685	37	1496	57.4	75	137
OK84287	6	1481	60.2	68	133
RL845472	31	1341	61.7	73	136
NA-W81-162-W	42	1331	58.3	69	135
NA-W83-256	41	1300	58.3	68	134
Bounty-122	38	1232	53.3	71	135
C082009	20	1208	59.1		
WH180001	39	1186	57.9		
NA-W84-229	40	1186	57		
C0830014	23	1117	6		
NE84557	27	1058	6		
C0830034	22	1039	!		
NE83407	28	935	!		
IL83-7439	43	925	!		
CI13996	2	894	!		
AGC-113	33	820	!		
CI17826	3	819	!		
NE82533	26	704	!		
TX86A7041	17	604	!		
CI1442	1	510	!		
MEAN		1542			
LSD(.05)		445			
C.V.		17.7			

MANHATTAN

KANSAS

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	LEAF SEV. %	RUST RESP. 0-9
TXGH13622	13	4675	81.8	80	131	70	8
RL844677	30	4651	82.2	87	133	15	3
XH685	37	4637	78.9	82	131	50	8
TX84V1317	14	4601	80.6	73	131	20	8
XW161	35	4505	81	67	129	10	3
OK86215	8	4391	80.9	74	130	50	8
NA-W83-256	41	4382	79.5	79	131	70	8
NA-W81-162-W	42	4338	82	71	132	30	8
XW141	34	4311	78.8	72	133	20	3
TX87HA1	45	4246	80.7	91	130	15	8
TX84V1336	12	4236	80.2	76	131	30	7
NE82656	29	4223	78.4	75	135	15	3
AGC-113	33	4215	77.7	74	134	70	8
XH675	36	4202	79.6	81	132	50	8
IL80-1251	44	4155	80.6	74	134	30	8
TX81V6607-2	15	4123	83.5	69	131	15	7
TXGH10563B	11	4104	78.8	78	130	60	8
TX81V6582-2	10	4043	81.7	71	130	50	8
WH180001	39	4002	79.4	79	133	30	3
TX86A7041	17	3991	78.1	68	132	10	3
TX84V1736	16	3990	81.3	70	129	40	8
NA-W84-229	40	3958	80	73	132	30	7
AGC-112	32	3936	79	79	130	70	8
RL845472	31	3912	80.8	81	132	20	8
NE83407	28	3903	77.3	72	133	80	8
OK86197	7	3890	80.9	78	131	60	8
NE84557	27	3884	81.7	87	134	25	8
OK84343	4	3866	79.7	70	133	30	7
C0830014	23	3852	79.5	67	131	70	8
KS84HW196	24	3844	80.8	76	131	70	8
NE82533	26	3840	80.8	80	134	70	8
TXGH10989	9	3822	78.7	63	133	70	8
TX86V1109	18	3807	79.1	87	132	10	3
TX86V1110	19	3777	78	84	131	10	3
CI17826	3	3762	77.9	77	132	80	8
C0830034	22	3704	80.6	78	135	80	8
KS82C2338	25	3692	81.4	79	130	80	8
IL83-7439	43	3656	80.4	85	133	15	8
C0830027	21	3526	81.9	77	132	30	3
OK84286	5	3451	81.3	67	132	60	8
CI13996	2	3389	80.9	90	133	70	8
C082009	20	3144	80.6	76	135	40	8
OK84287	6	3112	80.3	68	132	60	8
Bounty-122	38	3006	77	73	132	80	8
CI1442	1	2792	77.8	83	139	70	8

MEAN	3945
LSD(.05)	566
C.V.	8.8

HAYS

KANSAS

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1
TXGH13622	13	2712	79.5	61	134
TX81V6582-2	10	2641	82.1	55	132
TXGH10563B	11	2609	78.5	57	133
TX81V6607-2	15	2569	81.6	53	135
TXGH10989	9	2551	79.5	60	134
OK84343	4	2547	78.2	59	135
CO830034	22	2517	79.3	64	138
RL844677	30	2421	80.9	62	136
XW161	35	2419	79.1	53	131
KS84HW196	24	2401	81	61	132
TX87HA1	45	2383	79	58	132
TX84V1336	12	2349	79.6	54	135
CO830014	23	2340	78	63	135
NE83407	28	2336	76.2	59	137
CO830027	21	2327	81.4	58	136
NA-W83-256	41	2291	76.6	58	135
XH685	37	2287	78	61	135
AGC-112	32	2284	77.7	56	133
TX86V1109	18	2266	76.9	64	136
TX84V1317	14	2257	80.7	55	135
CI17826	3	2235	78	54	134
NA-W84-229	40	2233	77.3	54	136
IL80-1251	44	2233	78.9	59	136
OK84286	5	2215	79.1	54	135
RL845472	31	2215	79.2	56	136
OK86215	8	2201	79.2	57	133
Bounty-122	38	2201	76.2	57	134
KS82C2338	25	2186	81.4	59	132
XH675	36	2174	77.8	59	135
WH180001	39	2154	77.5	62	137
OK84287	6	2132	78.9	52	136
NE82533	26	2121	76.4	57	139
NA-W81-162-W	42	2118	77.8	50	135
IL83-7439	43	2107	77.5	59	135
AGC-113	33	2083	77.4	55	139
TX86V1110	19	2076	74.8	62	135
TX84V1736	16	2067	80.2	49	134
CI13996	2	2047	78	66	136
NE82656	29	2042	76.2	56	138
NE84557	27	2038	77.7	59	138
XW141	34	2022	72.8	51	139
OK86197	7	2009	79.7	58	132
TX86A7041	17	1993	75	54	138
CO82009	20	1883	76.4	57	138
KS87H66	46	1775	78.1	47	135
CI1442	1	1397	74.2	71	142
MEAN		2227			
LSD(.05)		427			
C.V.		11.7			

GARDEN CITY

KANSAS

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1
TXGH13622	13	3244	78.9	62	137
XH675	36	3219	76.2	62	137
AGC-112	32	3199	77	60	137
TXGH10563B	11	3167	76.1	58	136
TX81V6607-2	15	3158	81.2	57	138
TX87HA1	45	3042	77.7	63	137
TXGH10989	9	2982	77.5	60	138
KS82C2338	25	2977	78.1	60	138
TX84V1317	14	2874	78.4	58	137
C0830034	22	2860	77.8	58	140
C0830027	21	2840	78.6	65	137
OK84286	5	2831	77.6	62	137
C082009	20	2825	78.4	60	141
TX86V1109	18	2820	75.9	65	138
TX81V6582-2	10	2813	80.2	58	137
NA-W83-256	41	2802	75.6	60	138
RL844677	30	2795	77	60	139
AGC-113	33	2766	73.9	55	140
XH685	37	2739	76.5	58	138
NE82533	26	2733	75.9	60	139
OK84287	6	2706	78.2	60	137
OK86215	8	2684	77.6	62	137
RL845472	31	2677	77.9	58	138
OK86197	7	2659	77.2	60	137
TX86V1110	19	2641	74.9	62	138
NE82656	29	2639	74.3	57	139
CI17826	3	2621	76.6	57	137
TX84V1736	16	2596	76.6	57	136
NE83407	28	2556	73.4	55	140
CI13996	2	2554	78.2	68	138
IL80-1251	44	2533	77	57	139
KS84HW196	24	2529	77.9	62	137
XW141	34	2498	75	53	138
C0830014	23	2477	78.6	68	137
NE84557	27	2455	77.1	60	140
IL83-7439	43	2453	75.4	52	141
XW161	35	2399	75.7	53	137
NA-W81-162-W	42	2397	77.2	53	140
Bounty-122	38	2392	75.1	60	138
OK84343	4	2385	76.7	57	140
NA-W84-229	40	2368	75.9	53	140
TX84V1336	12	2345	77.4	55	137
WH180001	39	2280	76.1	62	138
TX86A7041	17	2260	71.8	55	139
CI1442	1	1924	75	70	144
MEAN		2683			
LSD(.05)		377			
C.V.		8.6			

AKRON

COLORADO

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL
TXGH13622	13	1835	65.3
AGC-112	32	1822	69.6
OK84343	4	1782	70.3
NE82656	29	1750	66.5
TXGH10563B	11	1699	64.4
TXGH10989	9	1649	66.2
RL845472	31	1643	67.8
CI17826	3	1582	63.1
NE84557	27	1568	72.7
TX87HA1	45	1547	65.3
RL844677	30	1534	65
TX81V6607-2	15	1508	68.4
AGC-113	33	1493	63.7
NE82533	26	1458	65.9
TX84V1736	16	1447	64.7
IL83-7439	43	1434	71.2
TX84V1336	12	1423	63.4
OK84286	5	1416	68.1
KS84HW196	24	1407	69.9
KS82C2338	25	1400	65.6
NE83407	28	1393	59.1
XH675	36	1378	64.7
TX84V1317	14	1325	67.8
OK86215	8	1315	66.2
XW161	35	1266	63.1
Bounty-122	38	1233	60
WH180001	39	1228	64.1
NA-W81-162-W	42	1221	63.4
OK86197	7	1217	68.4
C0830027	21	1205	69.9
CI13996	2	1203	69.3
NA-W83-256	41	1198	64.4
TX81V6582-2	10	1194	65.6
OK84287	6	1193	69
IL80-1251	44	1192	65.6
C082009	20	1179	68.4
XW141	34	1141	58.2
C0830034	22	1124	65.6
NA-W84-229	40	1122	69.3
XH685	37	1113	59.1
TX86A7041	17	1085	59.1
TX86V1110	19	1044	66.5
TX86V1109	18	987	.
CI1442	1	832	71.5
C0830014	23	791	69.3
MEAN		1346	
LSD(.05)		459	
C.V.		20.9	

BURLINGTON

COLORADO

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM
AGC-112	32	3175	71.2	84
TX84V1336	12	3122	72.4	79
KS84HW196	24	3025	74.3	81
RL845472	31	2968	76.1	89
KS82C2338	25	2964	73.3	79
OK86215	8	2932	71.5	79
OK84343	4	2873	72.4	79
TX87HA1	45	2851	72.4	89
OK84287	6	2841	72.4	84
NE82656	29	2820	68.1	91
XH685	37	2819	71.8	94
TXGH10563B	11	2817	70.3	84
C0830027	21	2786	74	91
TX81V6582-2	10	2784	73	79
OK84286	5	2764	74	84
RL844677	30	2748	71.2	99
TXGH13622	13	2715	71.5	86
IL80-1251	44	2698	72.4	84
TX84V1317	14	2693	73.7	76
NE82533	26	2686	70.9	81
TX81V6607-2	15	2669	75.2	79
NA-W84-229	40	2649	74.9	81
XW161	35	2647	70.6	69
TX86V1110	19	2635	70.6	91
CI13996	2	2630	74.3	112
TXGH10989	9	2629	69.9	84
WH180001	39	2621	72.4	84
OK86197	7	2619	71.8	81
TX86V1109	18	2577	70.9	91
NE84557	27	2550	72.4	99
NA-W83-256	41	2526	71.5	84
AGC-113	33	2488	68.1	94
NE83407	28	2451	68.7	81
IL83-7439	43	2427	72.7	89
CI17826	3	2396	69.6	81
C0830014	23	2378	72.7	107
TX86A7041	17	2371	69.9	74
NA-W81-162-W	42	2363	73	69
XH675	36	2309	69.6	94
C082009	20	2230	71.8	107
C0830034	22	2001	69	94
CI1442	1	1888	67.5	117
Bounty-122	38	1873	68.1	84
XW141	34	1821	67.5	76
TX84V1736	16	1696	73	76
MEAN		2589		
LSD(.05)		585		
C.V.		13.8		

JULESBURG

COLORADO

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM
RL845472	31	2254	69.6	81
KS82C2338	25	2088	68.1	79
NE82656	29	2078	64.7	84
TX87HA1	45	2016	68.1	89
NE84557	27	2006	66.5	99
WH180001	39	1980	65.9	99
AGC-112	32	1921	67.5	81
CI13996	2	1866	67.8	94
NE82533	26	1733	63.1	91
IL80-1251	44	1732	66.2	89
CI17826	3	1679	63.1	76
OK86197	7	1649	65.3	76
NE83407	28	1577	61.6	84
TXGH13622	13	1567	61	79
RL844677	30	1550	67.8	97
TXGH10563B	11	1538	63.7	84
C0830034	22	1521	62.2	91
NA-W81-162-W	42	1491	66.8	74
XH685	37	1485	62.5	89
NA-W83-256	41	1485	64.7	91
OK86215	8	1473	62.5	74
OK84343	4	1449	65.3	79
XH675	36	1434	65.6	84
C0830014	23	1408	60	81
XW161	35	1337	61.9	69
TX81V6607-2	15	1320	68.1	71
IL83-7439	43	1290	66.2	102
TX86V1109	18	1280	63.1	97
C082009	20	1273	68.7	89
TX81V6582-2	10	1260	66.2	61
TX86V1110	19	1253	64.7	91
KS84HW196	24	1234	66.2	74
AGC-113	33	1210	59.4	89
Bounty-122	38	1198	58.8	84
NA-W84-229	40	1196	67.2	74
TX84V1736	16	1139	65.9	58
OK84286	5	1081	64.4	76
TX84V1317	14	1057	65	74
TX84V1336	12	1043	64.4	69
OK84287	6	1042	62.8	71
XW141	34	990	59.4	71
TXGH10989	9	980	61	64
C0830027	21	960	65.3	71
TX86A7041	17	936	55.4	71
CI1442	1	784	67.5	102
MEAN		1441		
LSD(.05)		548		
C.V.		23.3		

LINCOLN

NEBRASKA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	LEAF RUST SEV. %	LEAF RUST RESP. 0-9
AGC-112	32	4779	78.4	78	137		8
TXGH13622	13	4721	83.7	75	136		8
RL844677	30	4636	83.3	83	138		2
XW161	35	4600	82.9	67	137		2
TXGH10563B	11	4589	79.7	75	136		8
TX87HA1	45	4562	81.8	79	138		8
AGC-113	33	4472	81	79	139		8
TX84V1317	14	4470	82.3	70	139		7
OK86215	8	4434	80.8	79	137		2
CO830034	22	4414	81.4	85	138		8
TX86V1109	18	4389	81.4	86	137		2
NA-W81-162-W	42	4380	82.7	70	137		8
IL80-1251	44	4369	81.9	77	139		7
NE84557	27	4360	82.4	82	139		8
TX81V6582-2	10	4351	82.9	66	136		8
XH685	37	4329	80.6	86	138		8
IL83-7439	43	4320	80.9	85	137		7
CI17826	3	4295	79.2	77	137		8
OK86197	7	4232	81.4	75	137		8
TX86A7041	17	4228	79.3	75	138		2
TX81V6607-2	15	4178	84.2	69	138		5
XH675	36	4154	80.5	86	138		8
RL845472	31	4152	80.4	84	138		7
CO830027	21	4109	84.4	81	138		5
TX84V1336	12	4060	82.8	71	138		3
NE83407	28	4006	79.1	73	139		8
OK84286	5	3905	80.9	72	137		2
NA-W84-229	40	3880	80.2	74	137		2
OK84343	4	3849	79.2	68	139		5
NA-W83-256	41	3838	80	75	138		7
NE82656	29	3835	77.7	80	139		2
OK84287	6	3824	80.9	70	137		2
TXGH10989	9	3806	81.7	69	138		8
CI13996	2	3719	82	91	138		8
TX86V1110	19	3708	80.4	87	136		2
WH180001	39	3679	80.9	81	137		3
KS82C2338	25	3672	82.6	73	137		5
KS84HW196	24	3665	81.5	73	137		8
CO830014	23	3549	78.9	82	138		8
NE82533	26	3490	81.7	80	139		8
CO82009	20	3217	82.4	83	140		7
Bounty-122	38	3212	77.9	75	138		8
TX84V1736	16	3174	83.6	71	137		5
XW141	34	3120	78.3	67	137		2
CI1442	1	2923	80.1	95	140		7
MEAN		4037					
LSD(.05)		614					
C.V.		9.3					

CLAY CENTER

NEBRASKA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM
NE82656	29	3404	76.8	75
NE83407	28	3097	75.7	62
NE84557	27	2803	79.3	74
CI13996	2	2745	79.5	82
TXGH10563B	11	2734	77.1	66
AGC-112	32	2714	76.9	66
TXGH13622	13	2703	79.7	66
NE82533	26	2697	77.8	70
XH675	36	2669	77.8	71
RL844677	30	2642	79.9	69
TX84V1317	14	2641	80.9	64
NA-W83-256	41	2631	77	64
TX86A7041	17	2627	75.7	64
IL80-1251	44	2622	79.2	67
RL845472	31	2564	79.3	73
XW161	35	2558	78.7	60
XH685	37	2477	77.4	70
CI17826	3	2470	77.7	65
NA-W84-229	40	2428	77.8	63
KS82C2338	25	2425	79.5	64
OK86197	7	2340	80	63
C0830034	22	2292	79.6	68
IL83-7439	43	2265	77	65
CI1442	1	2208	75.3	90
C0830027	21	2194	80.2	65
C0830014	23	2131	78.6	70
OK86215	8	2104	78.4	63
TX87HA1	45	2078	78.8	64
TX84V1336	12	2067	79.3	63
C082009	20	2062	78.4	67
TX86V1109	18	2058	78.2	65
XW141	34	2040	76	59
AGC-113	33	2020	75.6	72
TX86V1110	19	1956	76.9	67
NA-W81-162-W	42	1945	80	58
OK84286	5	1923	79.2	59
Bounty-122	38	1821	75.1	60
TX81V6607-2	15	1770	82.2	57
TX81V6582-2	10	1749	81.5	60
WH180001	39	1723	76.6	67
OK84287	6	1706	79.6	56
TX84V1736	16	1640	79.5	61
KS84HW196	24	1473	80.9	63
OK84343	4	1277	77.1	60
TXGH10989	9	960	77	64
MEAN		2254		
LSD(.05)		625		
C.V.		17.0		

ALLIANCE

NEBRASKA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL
AGC-113	33	4925	72.5
AGC-112	32	4799	72.4
TX84V1736	16	4780	72.9
XH685	37	4778	73.5
WH180001	39	4764	73.9
TXGH10563B	11	4735	73.9
XH675	36	4690	72.9
CI17826	3	4666	73
TX87HA1	45	4623	76.8
TX81V6582-2	10	4616	77.4
IL80-1251	44	4606	73.7
NE83407	28	4555	70.6
NE82656	29	4552	71.5
TX84V1317	14	4500	74.8
TXGH13622	13	4457	75.2
NA-W83-256	41	4443	74.7
RL845472	31	4427	75.1
NA-W81-162-W	42	4380	76.9
OK86215	8	4376	73.5
NE82533	26	4374	77.4
KS82C2338	25	4369	75.1
XW161	35	4337	73.1
TX86A7041	17	4335	69
NA-W84-229	40	4327	75.5
TX86V1110	19	4314	74.4
TX86V1109	18	4261	74.3
Bounty-122	38	4224	72.2
XW141	34	4216	72
OK86197	7	4182	74.7
OK84286	5	4181	73.8
RL844677	30	4167	71
CO830027	21	4163	73.5
CO830034	22	4162	70.7
KS84HW196	24	4145	74.4
IL83-7439	43	4096	77.4
CI13996	2	4091	74.4
NE84557	27	4086	78.4
CO82009	20	4015	72.6
TX84V1336	12	3944	73.5
TXGH10989	9	3893	74.2
TX81V6607-2	15	3891	76.8
OK84343	4	3862	76.1
OK84287	6	3750	73.9
CO830014	23	3452	75.3
CI1442	1	3041	73.4
MEAN		4301	
LSD(.05)		482	
C.V.		6.9	

BROOKINGS

S. DAKOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1
NA-W83-256	41	2662	77.5	62	150
XH675	36	2341	77.5	65	151
CO830034	22	2313	76	63	151
NE83407	28	2238	76.9	56	151
OK84287	6	2199	80.2	58	150
NE82656	29	2178	75.7	64	150
AGC-113	33	2157	77.3	63	152
IL83-7439	43	2130	77.9	62	151
TX86V1110	19	2093	77.1	64	151
TX81V6607-2	15	2045	82.8	58	151
OK84286	5	1973	76.6	54	150
OK86215	8	1970	76.9	67	151
TX84V1336	12	1963	79.1	54	151
NE84557	27	1902	79.7	62	150
NE82533	26	1877	79.3	65	151
TX87HA1	45	1874	78.8	65	150
NA-W81-162-W	42	1863	79.7	58	150
XH685	37	1826	75.5	66	151
OK86197	7	1813	78.9	59	151
TX81V6582-2	10	1813	78	60	151
XW161	35	1807	77.1	52	151
CO830027	21	1794	80.2	68	151
NA-W84-229	40	1748	76	58	151
TX86A7041	17	1723	76.6	57	151
AGC-112	32	1698	76	58	150
CI17826	3	1692	76.2	55	150
CI13996	2	1691	77.9	68	149
RL844677	30	1690	79.5	65	150
KS82C2338	25	1657	79.5	62	151
RL845472	31	1608	78.6	61	150
TX86V1109	18	1600	75.7	59	151
TXGH13622	13	1592	76.9	51	151
TXGH10563B	11	1572	78.2	57	151
IL80-1251	44	1567	76.9	60	151
WH180001	39	1555	77.3	62	151
KS84HW196	24	1484	81.3	58	150
TX84V1317	14	1445	80		
CO82009	20	1361	77		
TX84V1736	16	1345			
OK84343	4	1267			
Bounty-122	38	1253			
CO830014	23	1186			
CI1442	1	1140			
TXGH10989	9	1090			
XW141	34	1042			
MEAN		1752			
LSD(.05)		548			
C.V.		19.2			

PRESHO

S. DAKOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1
TXGH13622	13	2460	70.4	55	148
AGC-112	32	2328	70.6	62	147
TXGH10563B	11	2154	69.5	58	148
CI13996	2	2095	69.7	64	148
OK86215	8	2082	70	57	147
TX81V6607-2	15	2074	74.2	54	148
NE84557	27	2047	66.4	58	149
NA-W83-256	41	2042	68.9	60	149
IL80-1251	44	2003	68.8	58	149
NA-W81-162-W	42	2001	69.1	53	149
CI17826	3	1974	66.9	53	148
RL845472	31	1966	71.1	57	150
TX86V1109	18	1921	69.5	58	148
XH675	36	1911	70.2	61	148
NE83407	28	1902	69.5	58	150
NE82533	26	1899	69.3	61	150
OK86197	7	1891	71.1	54	147
RL844677	30	1880	67.5	60	151
TX81V6582-2	10	1839	67.3	59	150
TX87HA1	45	1837	71.5	61	147
OK84286	5	1794	67.8	55	149
IL83-7439	43	1791	66.8	53	150
NE82656	29	1779	67.1	61	150
TX84V1336	12	1725	67.5	49	149
KS82C2338	25	1723	69.3	59	149
C0830034	22	1704	68.4	58	150
C0830027	21	1689	71.5	58	149
TX84V1317	14	1677	69.8	52	149
WH180001	39	1660	68.8	58	150
NA-W84-229	40	1636	68.2	52	151
C082009	20	1614	69.3	52	150
TXGH10989	9	1610	68.8	54	150
KS84HW196	24	1608	71.5	56	147
TX86V1110	19	1592	60	58	148
XH685	37	1569	68.2	60	149
C0830014	23	1560	68.8	62	148
OK84287	6	1538	70.2	53	148
TX86A7041	17	1510	63.1	56	150
AGC-113	33	1481	62.8	56	151
XW141	34	1423	64.6	58	151
TX84V1736	16	1418	68.4	47	148
Bounty-122	38	1402	66.4	60	148
OK84343	4	1391	67.8	57	151
CI1442	1	1361	67.1	69	155
XW161	35	1343	68.2	50	148
MEAN		1776			
LSD(.05)		443			
C.V.		15.3			

CASSELTON

N. DAKOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	WINTER SURVIVAL %
CI1442	1	32
CI13996	2	32
CI17826	3	22
OK84343	4	2
OK84286	5	12
OK84287	6	12
OK86197	7	12
OK86215	8	12
TXGH10989	9	27
TX81V6582-2	10	7
TXGH10563B	11	28
TX84V1336	12	5
TXGH13622	13	12
TX84V1317	14	3
TX81V6607-2	15	0
TX84V1736	16	10
TX86A7041	17	10
TX86V1109	18	10
TX86V1110	19	18
CO82009	20	5
CO830027	21	0
CO830034	22	2
CO830014	23	2
KS84HW196	24	3
KS82C233B	25	5
NE82533	26	8
NE84557	27	12
NE83407	28	20
NE82656	29	35
RL844677	30	13
RL845472	31	18
AGC-112	32	55
AGC-113	33	33
XW141	34	32
XW161	35	3
XH675	36	5
XH685	37	17
Bounty-122	38	0
WH180001	39	2
NA-W84-229	40	2
NA-W83-256	41	8
NA-W81-162-W	42	3
IL83-7439	43	33
IL80-1251	44	25
TX87HA1	45	30

COLUMBIA

MISSOURI

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	LEAF RUST: SEV. %	LEAF RUST: RESP: 0-9	BYD VIRUS 0-9
TXGH13622	13	6424	77.1	91	131	40		7
XH675	36	6413	74.9	92	132	12		5
TX87HA1	45	6133	77.4	91	131	13		7
OK86215	8	6056	76.1	89	130	10		6
WH180001	39	6054	75.1	97	133	5		5
AGC-112	32	6020	75.2	88	131	50		8
TX81V6582-2	10	5993	76.8	83	130	7		8
XH685	37	5935	74	88	133	10		5
TX84V1317	14	5914	75.6	81	131	4		7
TXGH10989	9	5910	73.4	87	132	7		5
IL83-7439	43	5906	75.3	101	134	.		7
OK84286	5	5894	76.2	86	131	.		5
NA-W81-162-W	42	5861	76.8	84	131	7		7
RL844677	30	5810	75.9	86	135	4		5
RL845472	31	5810	76.4	94	134	5		5
TX81V6607-2	15	5689	76.9	81	131	4		6
OK84287	6	5636	76.6	88	130	2		5
OK86197	7	5578	75.3	91	129	17		7
IL80-1251	44	5570	74.3	88	136	2		6
XW161	35	5538	73.4	82	129	.		7
KS82C2338	25	5517	77.9	88	130	10		7
TX86V1109	18	5500	76	94	130	.		5
TX84V1336	12	5459	74	86	130	3		8
NA-W83-256	41	5443	74.2	88	134	4		5
NE83407	28	5439	73.3	83	134	5		5
CO830027	21	5276	77	90	131	5		6
NE84557	27	5270	76.6	98	137	4		5
TXGH10563B	11	5259	76.2	88	130	40		8
TX86A7041	17	5252	71.6	85	134	2		6
CO830034	22	5249	75.5	97	135	17		6
KS84HW196	24	5247	75.9	85	130	23		8
AGC-113	33	5245	72.1	91	135	23		7
TX84V1736	16	5205	76.8	78	129	15		8
OK84343	4	5181	74	83	134	.		6
NE82656	29	5149	72.6	85	136	.		5
TX86V1110	19	5026	75.9	93	129	.		5
Bounty-122	38	5026	73.7	87	131	10		8
NE82533	26	4960	75.2	93	136	8		5
CI17826	3	4923	75.6	89	133	43		8
XW141	34	4839	67.6	82	135	2		6
NA-W84-229	40	4777	74.4	84	133	4		6
CO830014	23	4770	76.2	104	131	10		6
CI13996	2	4271	72.1	105	136	23		6
CO82009	20	4049	75.2	94	136	5		6
CI1442	1	3917	73.1	109	137	17		5
MEAN		5431						
LSD(.05)		1007						
C.V.		11.5						

AMES

IOWA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	DAYS TO RIPENING FROM 1/1	LODGING %	WINTER SURVIVAL %
NE82656	29	4351	75.3	86	142	174	1	97
TX87HA1	45	4344	76.8	82	139	175	0	90
IL80-1251	44	4295	76.5	80	141	174	0	92
AGC-113	33	4235	76.2	74	143	176	0	94
NE83407	28	4154	75.6	75	140	175	1	88
TX86V1110	19	4080	76.1	77	139	171	0	94
AGC-112	32	4013	73.4	76	139	174	0	89
IL83-7439	43	3878	77.4	73	143	173	1	94
TXGH13622	13	3847	76.5	72	141	176	0	69
RL845472	31	3766	77.4	82	141	174	0	93
CI13996	2	3753	76.8	92	142	174	6	94
TX86V1109	18	3688	75.9	76	139	171	0	96
NE82533	26	3528	76	80	143	176	1	77
XW161	35	3488	76.6	60	137	172	0	95
CI17826	3	3475	74.9	78	139	175	0	86
TX86A7041	17	3414	75.6	69	142	173	0	83
OK86215	8	3401	77.8	73	139	173	1	85
OK84286	5	3331	79.7	70	140	175	0	81
XH675	36	3250	76.6	76	140	176	0	77
RL844677	30	3203	78.6	80	142	176	2	73
TX84V1736	16	3170	79.3	64	139	172	2	73
XH685	37	3163	76.2	77	140	176	1	85
OK84287	6	3134	79.2	69	140	175	1	73
NA-W83-256	41	3022	76.1	70	141	175	1	81
TXGH10563B	11	2975	74.3	73	140	174	1	69
CI1442	1	2948	76.5	98	148	179	9	93
NE84557	27	2921	79.1	80	145	177	1	45
CO830034	22	2878	78.3	78	144	177	0	60
OK86197	7	2851	78.2	70	141	173	0	59
TX84V1336	12	2627	76.9	63	140	174	0	55
XW141	34	2365	70	62	142	176	0	84
NA-W81-162-W	42	2365	78.8	58	142	176	2	47
KS82C2338	25	2183	78.9	69	140	174	0	47
CO82009	20	2136	77.4	75	145	179	0	70
CO830027	21	2047	78.7	72	141	176	1	40
TX84V1317	14	1867	79.2	60	140	175	0	22
Bounty-122	38	1825	73.8	67	143	177	1	32
KS84HW196	24	1401	79.9	62	142	174	0	28
WH180001	39	1219	74.4	73	143	176	1	22
CO830014	23	1078	76.4	68	141	177	0	17
NA-W84-229	40	1029	77.5	56	143	178	0	12
TX81V6582-2	10	726	.	58	143	176	0	12
OK84343	4	460	.	63	145	176	0	5
TXGH10989	9	448	.	65	145	178	0	4
TX81V6607-2	15	195	.	48	145	175	0	2
MEAN		2812						
LSD(.05)		1087						
C.V.		23.7						

URBANA

ILLINOIS

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	WINTER SURVIVAL %
TX87HA1	45	5070	75.3	87	136	100
TXGH13622	13	4881	76.5	87	135	100
TXGH10563B	11	4801	74.2	81	136	100
OK86215	8	4795	76	82	135	100
TX86V1110	19	4707	74.8	85	135	100
NE83407	28	4700	73.9	85	138	100
OK84286	5	4695	77	82	136	100
TX86V1109	18	4641	75.3	92	136	100
RL844677	30	4591	75.5	94	138	100
AGC-112	32	4525	73.7	78	136	100
XW161	35	4518	74.7	75	136	100
OK84287	6	4515	77.8	80	136	100
IL80-1251	44	4488	76.2	90	139	100
IL83-7439	43	4476	77	91	140	100
CI17826	3	4472	73.9	80	136	100
NA-W83-256	41	4453	74.7	88	138	100
KS84HW196	24	4436	77.5	81	136	100
AGC-113	33	4403	74.4	89	139	100
TX84V1736	16	4361	76	74	135	100
C0830034	22	4354	74.8	90	140	100
TX84V1336	12	4350	75.7	76	135	100
NE82533	26	4348	75.8	91	139	100
NE84557	27	4318	76.5	96	141	100
OK84343	4	4291	73.9	78	138	100
TX84V1317	14	4254	76.4	76	135	100
XH675	36	4228	73.3	88	137	93
KS82C2338	25	4169	76.6	81	136	100
OK86197	7	4149	75.8	81	136	100
NE82656	29	4044	71.7	86	140	100
RL845472	31	4007	76.5	90	138	100
XH685	37	3991	72.7	90	137	100
NA-W81-162-W	42	3963	77.6	72	136	100
C0830027	21	3860	76.7	86	136	100
TX86A7041	17	3847	72.8	74	139	100
XW141	34	3691	71.3	79	139	100
C0830014	23	3663	74.4	91	137	100
CI13996	2	3553	75.4	97	141	100
WH180001	39	3426	72.9	84	139	100
C082009	20	3335	75.4	90	139	100
Bounty-122	38	3108	70.9	80	137	100
NA-W84-229	40	2837	72.8	72	138	100
CI1442	1	2626	71.2	98	142	100
TXGH10989	9	2598	72	69	137	45
TX81V6582-2	10	1953	74.5	58	137	33
TX81V6607-2	15	1128	75.4	59	138	8
MEAN		4036				
LSD(.05)		645				
C.V.		9.8				

LIND

WASHINGTON

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1
RL844677	30	2145	80.2	64	141
NA-W84-229	40	2069	79.9	58	139
NE84557	27	2049	79.3	66	141
TX84V1336	12	1997	81	60	137
WH180001	39	1997	77.1	64	140
C0830034	22	1984	79.3	56	141
XH685	37	1975	77.5	60	139
TX86A7041	17	1957	76.8	53	141
RL845472	31	1946	78.3	60	138
AGC-112	32	1941	78.2	58	138
TX84V1736	16	1907	79.2	51	137
NE82533	26	1901	78.6	59	140
CI17826	3	1887	79.1	52	138
C082009	20	1881	79.2	64	142
CI13996	2	1825	79.9	66	137
C0830014	23	1820	79.6	70	137
TXGH13622	13	1744	78.7	57	138
XH675	36	1740	76.9	60	140
AGC-113	33	1690	78	58	142
XW161	35	1688	80.2	55	137
TXGH10563B	11	1679	77.7	59	137
NE82656	29	1679	76.9	58	143
NA-W83-256	41	1632	76.5	56	141
IL83-7439	43	1630	77.4	55	138
TX86V1109	18	1592	77	61	138
KS82C2338	25	1592	79.6	59	137
TX81V6582-2	10	1584	80.5	56	138
KS84HW196	24	1567	79.9	57	137
C0830027	21	1558	79.3	60	141
TX81V6607-2	15	1547	80.1	52	139
Bounty-122	38	1547	76.2	63	140
OK86215	8	1482	77.1	52	138
NE83407	28	1439	77	56	142
CI1442	1	1437	78	68	146
IL80-1251	44	1436	76.1	61	141
TX84V1317	14	1403	79.7	57	138
OK84286	5	1374	76.9	58	142
NA-W81-162-W	42	1365	78.9	51	140
OK84343	4	1341	75.7	60	141
TX86V1110	19	1325	75.9	62	138
TX87HA1	45	1314	78.8	60	137
TXGH10989	9	1309	77.4	59	139
XW141	34	1298	77.3	53	142
OK86197	7	1121	77	53	139
OK84287	6	1085	76.8	57	142
MEAN		1655			
LSD(.05)		304			
C.V.		11.2			

ABERDEEN

IDAHO

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	DAYS TO RIPENING FROM 1/1	LODGING 0-9	STRAW STRENGTH 1-5
TX84V1336	12	6427	86	152	188	0	3
TXGH10563B	11	6143	92	154	189	3	3
AGC-113	33	5865	104	159	189	0	4
C0830034	22	5782	98	159	187	1	3
CI17826	3	5515	92	153	185	1	2
TX81V6607-2	15	5499	82	154	187	0	3
TX84V1317	14	5376	81	153	186	0	3
TXGH13622	13	5333	92	156	188	1	3
C0830027	21	5314	95	155	188	2	4
NA-W84-229	40	5214	81	157	186	1	1
WH180001	39	5210	96	157	185	0	3
NA-W83-256	41	5177	93	159	188	2	2
C082009	20	5135	104	157	189	1	2
XW161	35	5130	76	151	185	0	1
IL80-1251	44	5043	90	155	184	0	3
Bounty-122	38	4994	91	158	189	0	2
AGC-112	32	4973	86	155	185	1	2
XW141	34	4970	82	156	187	0	2
TX86V1110	19	4954	96	154	184	0	3
NE83407	28	4940	91	158	188	0	3
OK86215	8	4938	91	151	187	0	2
TX86V1109	18	4887	95	154	184	0	3
TX87HA1	45	4886	92	155	188	1	3
NA-W81-162-W	42	4851	82	156	199	0	2
TXGH10989	9	4831	86	152	186	1	3
TX86A7041	17	4791	82	159	186	1	3
IL83-7439	43	4771	93	156	186	0	1
XH675	36	4751	95	157	186	0	3
TX81V6582-2	10	4744	80	150	185	1	2
NE82533	26	4739	86	156	186	0	3
XH685	37	4683	94	156	186	1	3
RL845472	31	4607	91	155	186	2	4
KS82C2338	25	4585	87	155	185	0	3
NE84557	27	4575	94	156	183	0	2
TX84V1736	16	4534	76	151	199	1	2
OK84287	6	4503	88	155	188	0	2
RL844677	30	4468	103	159	189	0	3
OK84286	5	4446	84	155	186	1	3
OK84343	4	4431	81	156	185	0	2
C0830014	23	4411	109	156	185	1	2
CI13996	2	4393	112	155	186	4	5
NE82656	29	4367	92	159	187	1	3
CI1442	1	3894	105	161	190	5	5
OK86197	7	3782	85	151	184	0	3
KS84HW196	24	3323	89	153	198	1	2
MEAN		4893					
LSD(.05)		1112					
C.V.		13.9					

Table 2. Summary of mean yields (kg/ha) of 46 wheat entries ... with state means and ranks.

VARIETY OR PEDIGREE	C.I. OR SEL. NO.	ENTRY NO.	BUSHLAND (DRYL.) TEXAS		BUSHLAND (IRR.) TEXAS		CHILLI-COTHE TEXAS		DALLAS TEXAS		TEXAS STATE MEAN	
TX71A562-6*4/Amigo*4//Largo	TXGH13622	13	3160	3	5102	10	4580	5	3973	7	4204	3
TAM-105*4/Amigo*4//Largo	TXGH10563B	11	3039	5	5502	4	4492	9	3630	18	4166	5
HRW Selection	AGC-112	32	3014	6	5142	8	4060	33	3395	27	3903	12
Winter Wheat Hybrid	XH675	36	2650	17	4922	12	4084	29	4222	1	3970	11
KS73146/TX71A1039	TX84V1336	12	3157	4	5661	3	4311	13	3933	8	4265	2
TAM W-101/W603//W558	XW161	35	1950	38	5360	5	4723	3	3984	6	4004	9
Must/3/T-105*4/Ami*4//Largo, TXGH10289	TX87HA1	45	2825	12	5273	6	4557	6	3702	17	4089	6
Winter Wheat Line	RL844677	30	2449	21	4009	36	4730	2	3770	14	3739	18
Winter Wheat Hybrid	XH685	37	2637	18	4649	20	4069	31	3924	9	3820	15
OK79257/Century Sib/2/Chisholm	OK86215	8	2672	16	4878	14	4046	34	3907	10	3876	13
TX71A374-4/TX71A1039-V1	TX84V1317	14	2977	7	5107	9	4389	11	3474	21	3987	10
TX69A330/IL76-3820	IL80-1251	44	2349	26	4400	24	4270	15	3136	37	3539	28
Payne*2/C0725052	OK84286	5	2825	12	4887	13	3974	37	3714	16	3850	14
Payne/W78-069	NA-W83-256	41	2369	24	4220	29	4066	32	4094	4	3687	21
Brule/3/Parker*4/Agent//Belot.198/Lcr	NE82656	29	1589	43	4036	34	4176	18	3354	28	3289	35
TAM-108/Arkan	TX86A7041	17	2319	30	4142	30	4152	21	4192	2	3701	20
TX71A1039-V1*3/Amigo	TX81V6607-2	15	3685	1	6226	1	4741	1	3560	19	4553	1
Complex Pedigree	NE83407	28	2043	34	4014	35	4317	12	3396	26	3442	32
74cb462/Trapper//Vona	C0830027	21	2839	10	4779	16	4656	4	3775	13	4012	8
C05926//7C/Tobari 63/3/Baca	C0830034	22	2857	9	3902	37	4140	23	3326	29	3556	27
HRW Selection	AGC-113	33	2435	22	2966	43	4096	28	3494	20	3248	40
TAM-105	CI17826	3	2835	11	4097	31	3717	41	2770	42	3355	34
OK11252A/W79-1226	NA-W81-162-W	42	2329	27	4487	22	4542	7	3791	12	3787	17
Winter Wheat Line	RL845472	31	2570	19	4297	28	4176	18	3297	32	3585	26
Sturdy*3/Amigo	TX81V6582-2	10	3373	2	5984	2	4311	13	3115	38	4195	4
Payne*2/C0725052	OK84287	6	2677	15	4711	18	3797	38	3420	24	3651	23
TAM-106 resel./TX69D4819	TX84V1736	16	2740	14	5183	7	4165	20	4081	5	4042	7
Bulk Selection	KS82C2338	25	2361	25	4694	19	4075	30	3298	31	3607	24
Rannaya/NE701136//CI13449/Ctk	TX86V1110	19	2326	28	4048	33	4398	10	3303	30	3518	29
Wrr/Sut//MoW6811/3/Aga S/4/NE68457/Ctk78	NE84557	27	2402	23	3249	39	4235	16	3177	34	3265	39
Rannaya/NE701136//CI13449/Ctk	TX86V1109	18	2063	33	4072	32	4131	24	3757	15	3506	30
Bounty Hybrid Wheat	WH180001	39	2031	35	4407	23	4122	25	3113	39	3418	33
Aurora/2*TAM W-101	OK84343	4	2260	31	4974	11	4013	35	3409	25	3664	22
Hawk/OK80099	OK86197	7	2460	20	4341	27	3670	42	3905	11	3594	25
W79-227/Payne	NA-W84-229	40	1927	40	4781	15	4001	36	3170	36	3470	31
IL77-4259/IL76-3845	IL83-7439	43	1541	44	3823	38	3757	40	3078	40	3050	42
KS73167/Agate//Sage sib	NE82533	26	1841	42	3045	42	4120	27	3294	33	3075	41
TAM W-101*4/Amigo*4//Largo	TXGH10989	9	2861	8	4757	17	4147	22	3471	22	3809	16
Bounty Hybrid Wheat	Bounty-122	38	1972	37	4642	21	4122	25	4190	3	3732	19
Bezostaya/TAM W-101//W558	XW141	34	1875	41	4344	26	4201	17	2699	43	3279	37
Scout 66	CI13996	2	1987	36	2870	44	3762	39	2910	41	2882	43
Bsn/Strlng//3*Sut/3/Eag/4/Pinnacle/2*Eag	KS84HW196	24	2321	29	4389	25	3237	44	3171	35	3279	38
74cb452/Vona//Baca	C0830014	23	1949	39	3210	40	4506	8	3465	23	3282	36
74F878/Wings//Vona	C082009	20	2114	32	3152	41	3654	43	2565	44	2871	44
Kharkof	CI1442	1	1017	45	1734	45	2849	45	1343	45	1736	45
	MEAN		2437		4410		4141		3461		3612	
	LSD(.05)		475		500		532		442		588	
	C.V.		13.9		6.9		7.9		7.8		8.9	

Table 2. Continued.

C.I. OR SEL. NO.	ENTRY NO.	LINCOLN NEBRASKA		CLAY CENTER NEBRASKA		ALLIANCE NEBRASKA		NEBRASKA STATE MEAN		AKRON COLORADO		BURLINGTON COLORADO		JULESBURG COLORADO		COLORADO STATE MEAN	
TXGH13622	13	4721	2	2703	7	4457	15	3960	3	1835	1	2715	17	1567	14	2039	7
TXGH10563B	11	4589	5	2734	5	4735	6	4019	2	1699	5	2817	12	1538	16	2018	9
AGC-112	32	4779	1	2714	6	4799	2	4097	1	1822	2	3175	1	1921	7	2306	1
XH675	36	4154	22	2669	9	4690	7	3838	9	1378	22	2309	39	1434	23	1707	30
TX84V1336	12	4060	25	2067	29	3944	39	3357	32	1423	17	3122	2	1043	39	1863	18
XW161	35	4600	4	2558	16	4337	22	3832	10	1266	25	2647	23	1337	25	1750	25
TX87HA1	45	4562	6	2078	28	4623	9	3754	14	1547	10	2851	8	2016	4	2138	5
RL844677	30	4636	3	2642	10	4167	31	3815	11	1534	11	2748	16	1550	15	1944	11
XH685	37	4329	16	2477	17	4778	4	3861	8	1113	40	2819	11	1485	19	1805	22
OK86215	8	4434	9	2104	27	4376	19	3638	18	1315	24	2932	6	1473	21	1907	13
TX84V1317	14	4470	8	2641	11	4500	14	3870	6	1325	23	2693	19	1057	38	1692	32
IL80-1251	44	4369	13	2622	14	4606	11	3866	7	1192	35	2698	18	1732	10	1874	17
OK84286	5	3905	27	1923	36	4181	30	3336	33	1416	18	2764	15	1081	37	1754	23
NA-W83-256	41	3838	30	2631	12	4443	16	3637	19	1198	32	2526	31	1485	19	1736	27
NE82656	29	3835	31	3404	1	4552	13	3931	4	1750	4	2820	10	2078	3	2216	3
TX86A7041	17	4228	20	2627	13	4335	23	3730	16	1085	41	2371	37	936	44	1464	41
TX81V6607-2	15	4178	21	1770	38	3891	41	3280	35	1508	12	2669	21	1320	26	1832	19
NE83407	28	4006	26	3097	2	4555	12	3886	5	1393	21	2451	33	1577	13	1807	21
C0830027	21	4109	24	2194	25	4163	32	3489	29	1205	30	2786	13	960	43	1650	35
C0830034	22	4414	10	2292	22	4162	33	3623	20	1124	38	2001	41	1521	17	1549	39
AGC-113	33	4472	7	2020	33	4925	1	3806	13	1493	13	2488	32	1210	33	1731	28
CI17826	3	4295	18	2470	18	4666	8	3810	12	1582	8	2396	35	1679	11	1886	16
NA-W81-162-W	42	4380	12	1945	35	4380	18	3568	24	1221	28	2363	38	1491	18	1692	33
RL845472	31	4152	23	2564	15	4427	17	3714	17	1643	7	2968	4	2254	1	2289	2
TX81V6582-2	10	4351	15	1749	39	4616	10	3572	22	1194	33	2784	14	1260	30	1746	26
OK84287	6	3824	32	1706	41	3750	43	3093	40	1193	34	2841	9	1042	40	1692	31
TX84V1736	16	3174	43	1640	42	4780	3	3198	36	1447	15	1696	45	1139	36	1427	43
KS82C2338	25	3672	37	2425	20	4369	21	3488	30	1400	20	2964	5	2088	2	2151	4
TX86V1110	19	3708	35	1956	34	4314	25	3326	34	1044	42	2635	24	1253	31	1644	36
NE84557	27	4360	14	2803	3	4086	37	3750	15	1568	9	2550	30	2006	5	2041	6
TX86V1109	18	4389	11	2058	31	4261	26	3569	23	987	43	2577	29	1280	28	1615	37
WH180001	39	3679	36	1723	40	4764	5	3389	31	1228	27	2621	27	1980	6	1943	12
OK84343	4	3849	29	1277	44	3862	42	2996	43	1782	3	2873	7	1449	22	2035	8
OK86197	7	4232	19	2340	21	4182	29	3585	21	1217	29	2619	28	1649	12	1828	20
NA-W84-229	40	3880	28	2428	19	4327	24	3545	26	1122	39	2649	22	1196	35	1656	34
IL83-7439	43	4320	17	2265	23	4096	35	3560	25	1434	16	2427	34	1290	27	1717	29
NE82533	26	3490	40	2697	8	4374	20	3521	27	1458	14	2686	20	1733	9	1959	10
TXGH10989	9	3806	33	960	45	3893	40	2886	44	1649	6	2629	26	980	42	1752	24
Bounty-122	38	3212	42	1821	37	4224	27	3086	41	1233	26	1873	43	1198	34	1435	42
XW141	34	3120	44	2040	32	4216	28	3126	37	1141	37	1821	44	990	41	1317	44
CI13996	2	3719	34	2745	4	4091	36	3518	28	1203	31	2630	25	1866	8	1900	14
KS84HW196	24	3665	38	1473	43	4145	34	3095	39	1407	19	3025	3	1234	32	1889	15
C0830014	23	3549	39	2131	26	3452	44	3044	42	791	45	2378	36	1408	24	1526	40
C082009	20	3217	41	2062	30	4015	38	3098	38	1179	36	2230	40	1273	29	1561	38
CI1442	1	2923	45	2208	24	3041	45	2724	45	832	44	1888	42	784	45	1168	45

Table 2. Continued.

C.I. OR SEL. NO.	ENTRY NO.	HUTCHINSON* KANSAS		HAYS KANSAS		MANHATTAN KANSAS		GARDEN CITY KANSAS		KANSAS STATE MEAN		BROOKINGS S. DAKOTA		PRESHO S. DAKOTA		SOUTH DAKOTA STATE MEAN	
TXGH13622	13	1945	11	2712	1	4675	1	3244	1	3544	1	1592	32	2460	1	2026	6
TXGH10563B	11	2106	7	2609	3	4104	17	3167	4	3294	2	1572	33	2154	3	1863	17
AGC-112	32	2273	4	2284	18	3936	23	3199	3	3140	11	1698	25	2328	2	2013	7
XH675	36	1804	14	2174	29	4202	14	3219	2	3199	8	2341	2	1911	14	2126	2
TX84V1336	12	1607	20	2349	12	4236	11	2345	42	2977	17	1963	13	1725	24	1844	20
XW161	35	2511	2	2419	9	4505	5	2399	37	3108	13	1807	21	1343	45	1575	35
TX87HA1	45	2247	5	2383	11	4246	10	3042	6	3224	6	1874	16	1837	20	1855	18
RL844677	30	1647	18	2421	8	4651	2	2795	17	3289	3	1690	28	1880	18	1785	26
XH685	37	1496	26	2287	17	4637	3	2739	19	3221	7	1826	18	1569	35	1698	30
OK86215	8	2130	6	2201	26	4391	6	2684	22	3092	14	1970	12	2082	5	2026	5
TX84V1317	14	1508	25	2257	20	4601	4	2874	9	3244	5	1445	37	1677	28	1561	36
IL80-1251	44	1559	23	2233	23	4155	15	2533	31	2974	18	1567	34	2003	9	1785	27
OK84286	5	1727	16	2215	24	3451	40	2831	12	2832	35	1973	11	1794	21	1884	15
NA-W83-256	41	1300	30	2291	16	4382	7	2802	16	3159	10	2662	1	2042	8	2352	1
NE82656	29	1678	17	2042	39	4223	12	2639	26	2968	19	2178	6	1779	23	1979	9
TX86A7041	17	604	44	1993	43	3991	20	2260	44	2748	39	1723	24	1510	38	1616	33
TX81V6607-2	15	2499	3	2569	4	4123	16	3158	5	3283	4	2045	10	2074	6	2059	4
NE83407	28	935	38	2336	14	3903	25	2556	29	2932	26	2238	4	1902	15	2070	3
C0830027	21	1545	24	2327	15	3526	39	2840	11	2898	28	1794	22	1689	27	1741	29
C0830034	22	1039	37	2517	7	3704	36	2860	10	3027	15	2313	3	1704	26	2009	8
AGC-113	33	820	41	2083	35	4215	13	2766	18	3021	16	2157	7	1481	39	1819	24
CI17826	3	819	42	2235	21	3762	35	2621	27	2872	32	1692	26	1974	11	1833	22
NA-W81-162-W	42	1331	29	2118	33	4338	8	2397	38	2951	22	1863	17	2001	10	1932	12
RL845472	31	1341	28	2215	25	3912	24	2677	23	2935	24	1608	30	1966	12	1787	25
TX81V6582-2	10	2979	1	2641	2	4043	18	2813	15	3166	9	1813	19	1839	19	1826	23
OK84287	6	1481	27	2132	31	3112	43	2706	21	2650	42	2199	5	1538	37	1869	16
TX84V1736	16	1820	13	2067	37	3990	21	2596	28	2884	31	1345	39	1418	41	1382	39
KS82C2338	25	2011	9	2186	28	3692	37	2977	8	2952	21	1657	29	1723	25	1690	32
TX86V1110	19	1642	19	2076	36	3777	34	2641	25	2831	36	2093	9	1592	34	1843	21
NE84557	27	1058	36	2038	40	3884	27	2455	35	2792	38	1902	14	2047	7	1975	10
TX86V1109	18	1929	12	2266	19	3807	33	2820	14	2964	20	1600	31	1921	13	1760	28
WH180001	39	1186	33	2154	30	4002	19	2280	43	2812	37	1555	35	1660	29	1608	34
OK84343	4	1802	15	2547	6	3866	28	2385	40	2932	25	1267	40	1391	43	1329	42
OK86197	7	2082	8	2009	42	3890	26	2659	24	2852	34	1813	20	1891	17	1852	19
NA-W84-229	40	1186	34	2233	22	3958	22	2368	41	2853	33	1748	23	1636	30	1692	31
IL83-7439	43	925	39	2107	34	3656	38	2453	36	2739	40	2130	8	1791	22	1961	11
NE82533	26	704	43	2121	32	3840	31	2733	20	2898	29	1877	15	1899	16	1888	14
TXGH10989	9	2003	10	2551	5	3822	32	2982	7	3118	12	1090	44	1610	32	1350	41
Bounty-122	38	1232	31	2201	26	3006	44	2392	39	2533	44	1253	41	1402	42	1327	43
XW141	34	1580	21	2022	41	4311	9	2498	33	2943	23	1042	45	1423	40	1232	45
CI13996	2	894	40	2047	38	3389	41	2554	30	2663	41	1691	27	2095	4	1893	13
KS84HW196	24	1578	22	2401	10	3844	30	2529	32	2924	27	1484	36	1608	33	1546	37
C0830014	23	1117	35	2340	13	3852	29	2477	34	2890	30	1186	42	1560	36	1373	40
C082009	20	1208	32	1883	44	3144	42	2825	13	2617	43	1361	38	1614	31	1487	38
CI1442	1	510	45	1397	45	2792	45	1924	45	2038	45	1140	43	1361	44	1251	44
MEAN		1542		2237		3945		2683		2955		1752		1776		1764	
LSD(.05)		445		429		566		377		423		548		443		525	
C.V.		17.7		11.7		8.8		8.6		9.6		19.2		15.3		17.3	

* Not included in state or regional averages.

inued.

	ENTRY NO.	STILLWATER OKLAHOMA		ALTUS OKLAHOMA		LAHOMA OKLAHOMA		GOODWELL OKLAHOMA		OKLAHOMA STATE MEAN		COLUMBIA MISSOURI		URBANA ILLINOIS	
	13	3540	21	3019	37	3961	35	3684	38	3551	33	6424	1	4881	2
	11	3258	29	3137	31	4218	27	4413	9	3757	24	5259	28	4801	3
	32	2787	39	3277	21	4324	24	4207	16	3649	31	6020	6	4525	10
	36	3691	16	3371	15	4363	23	4292	14	3929	16	6413	2	4228	26
	12	3752	13	3501	7	5217	3	4346	13	4204	5	5459	23	4350	21
	35	3814	9	4049	2	5482	1	4805	2	4538	2	5538	20	4518	11
	45	3427	24	3270	22	4177	30	4135	19	3752	25	6133	3	5070	1
	30	3960	5	3378	14	4763	11	3913	30	4003	12	5810	15	4591	9
	37	3744	14	3547	4	4899	8	4092	23	4071	10	5935	8	3991	31
	8	3730	15	3100	33	4987	6	4785	3	4151	7	6056	4	4795	4
	14	4001	3	3488	10	5064	5	4441	8	4249	4	5914	9	4254	25
	44	3574	19	3189	27	4374	22	4176	17	3828	18	5570	19	4488	13
	5	3843	6	3326	17	4743	13	5098	1	4252	3	5894	12	4695	7
56	41	3029	37	3296	18	4143	32	4354	12	3705	27	5443	24	4453	16
NE82656	29	3251	30	3415	13	4318	25	4113	22	3774	22	5149	35	4044	29
TX86A7041	17	3608	17	3432	12	4813	10	4134	20	3997	13	5252	29	3847	34
TX81V6607-2	15	4089	1	3158	29	5115	4	4176	17	4134	8	5689	16	1128	45
NE83407	28	3497	23	3444	11	4195	28	3953	27	3772	23	5439	25	4700	6
C0830027	21	3571	20	2798	42	4526	19	3790	36	3671	30	5276	26	3860	33
C0830034	22	3861	7	2820	41	3784	39	3392	44	3464	38	5249	30	4354	20
AGC-113	33	3768	12	3096	34	3474	42	3808	34	3536	34	5245	32	4403	18
CI17826	3	2937	38	2897	39	3816	38	3436	43	3272	40	4923	39	4472	15
NA-W81-162-W	42	3336	26	3536	5	4729	15	4263	15	3966	15	5861	13	3963	32
RL845472	31	2651	41	3235	25	4286	26	4362	11	3633	32	5810	14	4007	30
TX81V6582-2	10	3587	18	3160	28	4760	12	4657	7	4041	11	5993	7	1953	44
OK84287	6	3976	4	3363	16	4704	16	4708	4	4188	6	5636	17	4515	12
TX84V1736	16	3780	11	3259	24	4946	7	4403	10	4097	9	5205	33	4361	19
KS82C2338	25	3316	27	3106	32	4659	17	4091	24	3793	21	5517	21	4169	27
TX86V1110	19	3036	36	3508	6	4740	14	3952	28	3809	20	5026	37	4707	5
NE84557	27	3289	28	3020	36	3927	37	3887	31	3531	36	5270	27	4318	23
TX86V1109	18	3058	35	3497	9	4388	21	3873	32	3704	28	5500	22	4641	8
WH180001	39	3784	10	3564	3	4578	18	4013	26	3985	14	6054	5	3426	38
OK84343	4	4083	2	4086	1	5351	2	4664	6	4546	1	5181	34	4291	24
OK86197	7	3510	22	3143	30	4064	34	4122	21	3709	26	5578	18	4149	28
NA-W84-229	40	3208	31	3289	20	4847	9	3922	29	3817	19	4777	41	2837	41
IL83-7439	43	3124	33	3222	26	3617	40	3697	37	3415	39	5906	11	4476	14
NE82533	26	2231	43	2554	43	3314	44	3593	39	2923	44	4960	38	4348	22
TXGH10989	9	3868	6	3266	23	4478	20	4020	25	3908	17	5910	10	2598	43
Bounty-122	38	3423	25	3290	19	4186	29	3864	33	3691	29	5026	36	3108	40
XW141	34	1766	45	3501	8	4166	31	4699	5	3533	35	4839	40	3691	35
CI13996	2	2692	40	2842	40	3458	43	3575	40	3141	43	4271	43	3553	37
KS84HW196	24	3199	32	3081	35	3956	36	3802	35	3509	37	5247	31	4436	17
C0830014	23	2475	42	2973	38	4080	33	3553	41	3270	41	4770	42	3663	36
C082009	20	3070	34	2472	44	3560	41	3504	42	3152	42	4049	44	3335	39
CI1442	1	1779	44	1680	45	1770	45	2592	45	1955	45	3917	45	2626	42
		[illegible]		3215		4348		4075		3746		5431		4036	

Table 2. Concluded.

C.I. OR SEL. NO.	ENTRY NO.	CLOVIS (IRR.) NEW MEXICO		CLOVIS (DRYL.)* NEW MEXICO		FARMINGTON NEW MEXICO		NEW MEXICO STATE MEAN		AMES IOWA		ABERDEEN IDAHO		LIND WASHINGTON		REGIONAL AVERAGE	
TXGH13622	13	7176	1	2922	3	5630	24	6403	3	3847	9	5333	8	1744	17	3798	1
TXGH10563B	11	7081	2	3257	1	6334	12	6708	1	2975	25	6143	2	1679	21	3757	2
AGC-112	32	6835	3	2044	11	5821	21	6328	6	4013	7	4973	17	1941	10	3730	3
XH675	36	5940	6	2456	6	6950	5	6445	2	3250	19	4751	28	1740	18	3667	4
TX84V1336	12	5617	15	2069	10	6569	9	6093	10	2627	30	6427	1	1997	4	3662	5
XW161	35	5691	12	678	45	5630	24	5660	17	3488	14	5130	14	1688	20	3657	6
TX87HA1	45	5331	23	2970	2	5381	28	5356	26	4344	2	4886	23	1314	41	3649	7
RL844677	30	5880	7	1342	33	6833	6	6357	4	3203	20	4468	37	2145	1	3639	8
XH685	37	5042	30	1483	28	7141	2	6092	11	3163	22	4683	31	1975	7	3598	9
OK86215	8	5483	17	1677	20	5117	35	5300	29	3401	17	4938	21	1482	32	3590	10
TX84V1317	14	5739	11	2033	12	6217	15	5978	13	1867	36	5376	7	1403	36	3587	11
IL80-1251	44	5095	29	1994	13	6070	16	5582	20	4295	3	5043	15	1436	35	3507	12
OK84286	5	6326	5	1743	17	5117	35	5722	16	3331	18	4446	38	1374	37	3505	13
NA-W83-256	41	5323	24	1578	24	5909	20	5616	18	3022	24	5177	12	1632	23	3494	14
NE82656	29	4722	34	973	40	5806	22	5264	31	4351	1	4367	42	1679	21	3449	15
TX86A7041	17	4407	38	1728	18	8006	1	6207	8	3414	16	4791	26	1957	8	3443	16
TX81V6607-2	15	4870	32	1980	14	6305	14	5587	19	195	45	5499	6	1547	30	3434	17
NE83407	28	4432	37	974	39	5073	38	4753	40	4154	5	4940	20	1439	33	3425	18
C0830027	21	5841	9	1521	27	6789	7	6315	7	2047	35	5314	9	1558	29	3424	19
C0830034	22	5236	26	1384	31	6745	8	5990	12	2878	28	5782	4	1984	6	3420	20
AGC-113	33	3985	41	868	42	7038	3	5512	22	4235	4	5865	3	1690	19	3420	21
CI17826	3	6348	4	2666	4	6349	11	6348	5	3475	15	5515	5	1887	13	3417	22
NA-W81-162-W	42	5098	28	1346	32	5586	26	5342	28	2365	31	4851	24	1365	38	3408	23
RL845472	31	4122	40	2338	7	5015	40	4568	43	3766	10	4607	32	1946	9	3405	24
TX81V6582-2	10	4506	36	1579	23	5938	18	5222	33	726	42	4744	29	1584	27	3365	25
OK84287	6	5858	8	2265	8	5249	30	5554	21	3134	23	4503	36	1085	45	3361	26
TX84V1736	16	5139	27	1700	19	5059	39	5099	36	3170	21	4534	35	1907	11	3355	27
KS82C2338	25	5248	25	1110	38	5147	34	5197	34	2183	33	4585	33	1592	25	3354	28
TX86V1110	19	5442	19	1538	25	5147	33	5294	30	4080	6	4954	19	1325	40	3349	29
NE84557	27	5536	16	1414	30	5440	27	5488	23	2921	27	4575	34	2049	3	3346	30
TX86V1109	18	4585	35	1601	22	5191	32	4888	39	3688	12	4887	22	1592	25	3342	31
WH180001	39	5640	13	1531	26	5938	18	5789	14	1219	39	5210	11	1997	5	3336	32
OK84343	4	5625	14	1629	21	5088	37	5356	27	460	43	4431	39	1341	39	3300	33
OK86197	7	5471	18	1198	34	4560	43	5015	38	2851	29	3782	44	1121	44	3278	34
NA-W84-229	40	5389	22	1113	37	6965	4	6177	9	1029	41	5214	10	2069	2	3268	35
IL83-7439	43	3765	45	871	41	5220	31	4492	44	3878	8	4771	27	1630	24	3210	36
NE82533	26	4756	33	831	43	5718	23	5237	32	3528	13	4739	30	1901	12	3187	37
TXGH10989	9	5762	10	2170	9	5000	41	5381	25	448	44	4831	25	1309	42	3181	38
Bounty-122	38	5419	21	1146	35	6056	17	5737	15	1825	37	4994	16	1547	30	3134	39
XW141	34	4387	39	697	44	6510	10	5448	24	2365	31	4970	18	1298	43	3074	40
CI13996	2	4907	31	2567	5	4311	44	4609	41	3753	11	4393	41	1825	15	3044	41
KS84HW196	24	3911	42	1455	29	3739	45	3825	45	1401	38	3323	45	1567	28	2984	42
C0830014	23	5420	20	1945	15	4795	42	5107	35	1078	40	4411	40	1820	16	2973	43
C082009	20	3775	44	1849	16	6334	12	5054	37	2136	34	5135	13	1881	14	2905	44
CI1442	1	3833	43	1126	36	5322	29	4578	42	2948	26	3894	43	1437	34	2270	45
MEAN		5244		1675		5781		5513		2812		4893		1655		3371	
LSD(.05)		1202		987		1255		N.S.		1087		1112		304		274	
C.V.		14.0		36.1		15.5		15.1		23.7		13.9		11.2		12.8	

* Not included in state or regional averages.

Table 3. Summary of mean yields (kg/ha) and ranks of 45 wheats grown in the 1988 Southern Regional Performance Nursery at 15 locations from the Midwest from which a CV of 14 or less and a significant F test for entries were obtained.

C.I. OR SEL. NO.	ENTRY NO.	STILLWATER OKLAHOMA		ALTUS OKLAHOMA		LAHOMA OKLAHOMA		GOODWELL OKLAHOMA		DALLAS TEXAS		CHILLI-COTHE TEXAS		BUSHLAND (IRR.) TEXAS		BUSHLAND (DRYL.) TEXAS	
TXGH10563B	11	3258	29	3137	31	4218	27	4413	9	3630	18	4492	9	5502	4	3039	5
XW161	35	3814	9	4049	2	5482	1	4805	2	3984	6	4723	3	5360	5	1950	38
TXGH13622	13	3540	21	3019	37	3961	35	3684	38	3973	7	4580	5	5102	10	3160	3
TX81V6607-2	15	4089	1	3158	29	5115	4	4176	17	3560	19	4741	1	6226	1	3685	1
TX84V1317	14	4001	3	3488	10	5064	5	4441	8	3474	21	4389	11	5107	9	2977	7
TX84V1336	12	3752	13	3501	7	5217	3	4346	13	3933	8	4311	13	5661	3	3157	4
AGC-112	32	2787	39	3277	21	4324	24	4207	16	3395	27	4060	33	5142	8	3014	6
TX81V6582-2	10	3587	18	3160	28	4760	12	4657	7	3115	38	4311	13	5984	2	3373	2
OK86215	8	3730	15	3100	33	4987	6	4785	3	3907	10	4046	34	4878	14	2672	16
TX87HA1	45	3427	24	3270	22	4177	30	4135	19	3702	17	4557	6	5273	6	2825	12
XH675	36	3691	16	3371	15	4363	23	4292	14	4222	1	4084	29	4922	12	2650	17
RL844677	30	3960	5	3378	14	4763	11	3913	30	3770	14	4730	2	4009	36	2449	21
XH685	37	3744	14	3547	4	4899	8	4092	23	3924	9	4069	31	4649	20	2637	18
OK84286	5	3843	8	3326	17	4743	13	5098	1	3714	16	3974	37	4887	13	2825	12
OK84343	4	4083	2	4086	1	5351	2	4664	6	3409	25	4013	35	4974	11	2260	31
C0830027	21	3571	20	2798	42	4526	19	3790	36	3775	13	4656	4	4779	16	2839	10
TXGH10989	9	3868	6	3266	23	4478	20	4020	25	3471	22	4147	22	4757	17	2861	8
NA-W81-162-W	42	3336	26	3536	5	4729	15	4263	15	3791	12	4542	7	4487	22	2329	27
TX84V1736	16	3780	11	3259	24	4946	7	4403	10	4081	5	4165	20	5183	7	2740	14
OK84287	6	3976	4	3363	16	4704	16	4708	4	3420	24	3797	38	4711	18	2677	15
NA-W83-256	41	3029	37	3296	18	4143	32	4354	12	4094	4	4066	32	4220	29	2369	24
IL80-1251	44	3574	19	3189	27	4374	22	4176	17	3136	37	4270	15	4400	24	2349	26
WH180001	39	3784	10	3564	3	4578	18	4013	26	3113	39	4122	25	4407	23	2031	35
KS82C2338	25	3316	27	3106	32	4659	17	4091	24	3298	31	4075	30	4694	19	2361	25
TX86A7041	17	3608	17	3432	12	4813	10	4134	20	4192	2	4152	21	4142	30	2319	30
OK86197	7	3510	22	3143	30	4064	34	4122	21	3905	11	3670	42	4341	27	2460	20
NA-W84-229	40	3208	31	3289	20	4847	9	3922	29	3170	36	4001	36	4781	15	1927	40
TX86V1110	19	3036	36	3508	6	4740	14	3952	28	3303	30	4398	10	4048	33	2326	28
TX86V1109	18	3058	35	3497	9	4388	21	3873	32	3757	15	4131	24	4072	32	2063	33
RL845472	31	2651	41	3235	25	4286	26	4362	11	3297	32	4176	18	4297	28	2570	19
NE83407	28	3497	23	3444	11	4195	28	3953	27	3396	26	4317	12	4014	35	2043	34
NE82656	29	3251	30	3415	13	4318	25	4113	22	3354	28	4176	18	4036	34	1589	43
C0830034	22	3861	7	2820	41	3784	39	3392	44	3326	29	4140	23	3902	37	2857	9
CI17826	3	2937	38	2897	39	3816	38	3436	43	2770	42	3717	41	4097	31	2835	11
NE84557	27	3289	28	3020	36	3927	37	3887	31	3177	34	4235	16	3249	39	2402	23
AGC-113	33	3768	12	3096	34	3474	42	3808	34	3494	20	4096	28	2966	43	2435	22
Bounty-122	38	3423	25	3290	19	4186	29	3864	33	4190	3	4122	25	4642	21	1972	37
KS84HW196	24	3199	32	3081	35	3956	36	3802	35	3171	35	3237	44	4389	25	2321	29
C0830014	23	2475	42	2973	38	4080	33	3553	41	3465	23	4506	8	3210	40	1949	39
XW141	34	1766	45	3501	8	4166	31	4699	5	2699	43	4201	17	4344	26	1875	41
IL83-7439	43	3124	33	3222	26	3617	40	3697	37	3078	40	3757	40	3823	38	1541	44
NE82533	26	2231	43	2554	43	3314	44	3593	39	3294	33	4120	27	3045	42	1841	42
CI13996	2	2692	40	2842	40	3458	43	3575	40	2910	41	3762	39	2870	44	1987	36
C082009	20	3070	34	2472	44	3560	41	3504	42	2565	44	3654	43	3152	41	2114	32
CI1442	1	1779	44	1680	45	1770	45	2592	45	1343	45	2849	45	1734	45	1017	45
MEAN		3355		3215		4340		4075		3461		4141		4410		2437	
LSD(.05)		359		375		364		555		442		532		500		476	

Table 3. Concluded.

C.I. OR SEL. NO.	ENTRY NO.	LINCOLN NEBRASKA		ALLIANCE NEBRASKA		HAYS KANSAS		MANHATTAN KANSAS		GARDEN CITY KANSAS		BURLINGTON COLORADO		CLOVIS (IRR.) NEW MEXICO		REGIONAL AVERAGE	
TXGH10563B	11	4589	5	4735	6	2609	3	4104	17	3167	4	2817	12	7081	2	4053	1
XW161	35	4600	4	4337	22	2419	9	4505	5	2399	37	2647	23	5691	12	4051	2
TXGH13622	13	4721	2	4457	15	2712	1	4675	1	3244	1	2715	17	7176	1	4048	3
TX81V6607-2	15	4178	21	3891	41	2569	4	4123	16	3158	5	2669	21	4870	32	4014	4
TX84V1317	14	4470	8	4500	14	2257	20	4601	4	2874	9	2693	19	5739	11	4005	5
TX84V1336	12	4060	25	3944	39	2349	12	4236	11	2345	42	3122	2	5617	15	3970	6
AGC-112	32	4779	1	4799	2	2284	18	3936	23	3199	3	3175	1	6835	3	3948	7
TX81V6582-2	10	4351	15	4616	10	2641	2	4043	18	2813	15	2784	14	4506	36	3913	8
OK86215	8	4434	9	4376	19	2201	26	4391	6	2684	22	2932	6	5483	17	3907	9
TX87HA1	45	4562	6	4623	9	2383	11	4246	10	3042	6	2851	8	5331	23	3894	10
XH675	36	4154	22	4690	7	2174	29	4202	14	3219	2	2309	39	5940	6	3886	11
RL844677	30	4636	3	4167	31	2421	8	4651	2	2795	17	2748	16	5880	7	3885	12
XH685	37	4329	16	4778	4	2287	17	4637	3	2739	19	2819	11	5042	30	3879	13
OK84286	5	3905	27	4181	30	2215	24	3451	40	2831	12	2764	15	6326	5	3872	14
OK84343	4	3849	29	3862	42	2547	6	3866	28	2385	40	2873	7	5625	14	3856	15
C0830027	21	4109	24	4163	32	2327	15	3526	39	2840	11	2786	13	5841	9	3755	16
TXGH10989	9	3806	33	3893	40	2551	5	3822	32	2982	7	2629	26	5762	10	3754	17
NA-W81-162-W	42	4380	12	4380	18	2118	33	4338	8	2397	38	2363	38	5098	28	3739	18
TX84V1736	16	3174	43	4780	3	2067	37	3990	21	2596	28	1696	45	5139	27	3733	19
OK84287	6	3824	32	3750	43	2132	31	3112	43	2706	21	2841	9	5858	8	3705	20
NA-W83-256	41	3838	30	4443	16	2291	16	4382	7	2802	16	2526	31	5323	24	3678	21
IL80-1251	44	4369	13	4606	11	2233	23	4155	15	2533	31	2698	18	5095	29	3677	22
WH180001	39	3679	36	4764	5	2154	30	4002	19	2280	43	2621	27	5640	13	3650	23
KS82C2338	25	3672	37	4369	21	2186	28	3692	37	2977	8	2964	5	5248	25	3647	24
TX86A7041	17	4228	20	4335	23	1993	43	3991	20	2260	44	2371	37	4407	38	3625	25
OK86197	7	4232	19	4182	29	2009	42	3890	26	2659	24	2619	28	5471	18	3618	26
NA-W84-229	40	3880	28	4327	24	2233	22	3958	22	2368	41	2649	22	5389	22	3597	27
TX86V1110	19	3708	35	4314	25	2076	36	3777	34	2641	25	2635	24	5442	19	3593	28
TX86V1109	18	4389	11	4261	26	2266	19	3807	33	2820	14	2577	29	4585	35	3570	29
RL845472	31	4152	23	4427	17	2215	25	3912	24	2677	23	2968	4	4122	40	3556	30
NE83407	28	4006	26	4555	12	2336	14	3903	25	2556	29	2451	33	4432	37	3540	31
NE82656	29	3835	31	4552	13	2042	39	4223	12	2639	26	2820	10	4722	34	3539	32
C0830034	22	4414	10	4162	33	2517	7	3704	36	2860	10	2001	41	5236	26	3532	33
CI17826	3	4295	18	4666	8	2235	21	3762	35	2621	27	2396	35	6348	4	3522	34
NE84557	27	4360	14	4086	37	2038	40	3884	27	2455	35	2550	30	5536	16	3473	35
AGC-113	33	4472	7	4925	1	2083	35	4215	13	2766	18	2488	32	3985	41	3471	36
Bounty-122	38	3212	42	4224	27	2201	26	3006	44	2392	39	1873	43	5419	21	3468	37
KS84HW196	24	3665	38	4145	34	2401	10	3844	30	2529	32	3025	3	3911	42	3378	38
C0830014	23	3549	39	3452	44	2340	13	3852	29	2477	34	2378	36	5420	20	3312	39
XW141	34	3120	44	4216	28	2022	41	4311	9	2498	33	1821	44	4387	39	3308	40
IL83-7439	43	4320	17	4096	35	2107	34	3656	38	2453	36	2427	34	3765	45	3245	41
NE82533	26	3490	40	4374	20	2121	32	3840	31	2733	20	2686	20	4756	33	3199	42
CI13996	2	3719	34	4091	36	2047	38	3389	41	2554	30	2630	25	4907	31	3162	43
C082009	20	3217	41	4015	38	1883	44	3144	42	2825	13	2230	40	3775	44	3012	44
CI1442	1	2923	45	3041	45	1397	45	2792	45	1924	45	1888	42	3833	43	2171	45
MEAN		4037		4301		2237		3945		2683		2589		5244		3631	
LSD(.05)		614		482		429		566		377		585		1202		289	
C.V.		9.3		6.9		11.7		8.8		8.6		13.8		14.0		9.6	

Table 4. Summary of mean yields (kg/ha) and ranks for 19 wheats grown in the Southern Regional Performance Nursery at 24 sites in 1987 and 1988 with state means and ranks.

VARIETY OR PEDIGREE	C.I. OR SEL. NO.	ENTRY NO.	DALLAS TEXAS		CHILLICOTHE TEXAS		BUSHLAND (IRR.) TEXAS		BUSHLAND (DRYL.) TEXAS		TEXAS STATE MEAN	
TAM-105*4/Amigo*4//Largo	TXGH10563B	11	3742	9	3366	4	4988	4	3384	5	3870	5
TX71A562-6*4/Amigo*4//Largo	TXGH13622	13	3802	7	3412	3	4759	7	3410	4	3846	6
TX71A374-4/TX71A1039-V1	TX84V1317	14	3806	6	3440	2	4934	5	3452	3	3908	4
Sturdy*3/Amigo	TX81V6582-2	10	3744	8	3265	5	5277	2	3554	2	3960	2
TX71A1039-V1*3/Amigo	TX81V6607-2	15	4086	2	3482	1	5502	1	3775	1	4211	1
TAM-105	CI17826	3	2981	15	2846	15	4062	13	3110	9	3250	14
KS73146/TX71A1039	TX84V1336	12	3999	3	3183	7	5128	3	3376	6	3922	3
Aurora/2*TAM W-101	OK84343	4	3831	5	3097	8	4806	6	2890	11	3656	8
74cb462/Trapper//Vona	C0830027	21	3590	10	3221	6	4727	8	3342	7	3720	7
C05926//7C/Tobari 63/3/Baca	C0830034	22	3387	11	3050	10	3803	15	3046	10	3321	12
Bounty Hybrid Wheat	Bounty-122	38	4247	1	2992	12	4421	11	2751	14	3603	10
Bulk Selection	KS82C2338	25	3226	13	3081	9	4482	10	2884	12	3418	11
Bezostaya/TAM W-101//W558	XW141	34	2307	18	2980	13	3966	14	2564	16	2954	16
KS73167/Agate//Sage sib	NE82533	26	3219	14	2892	14	3517	16	2444	17	3018	15
TAM W-101*4/Amigo*4//Largo	TXGH10989	9	3852	4	3005	11	4483	9	3154	8	3624	9
Bsn/Strlng//3*Sut/3/Eag/4/Pinnacle/2*Eag	KS84HW196	24	3263	12	2771	16	4217	12	2836	13	3272	13
Scout 66	CI13996	2	2766	16	2647	18	2990	18	2655	15	2765	17
74F878/Wings//Vona	C082009	20	2752	17	2651	17	3212	17	2396	18	2753	18
Kharkof	CI1442	1	1550	19	1923	19	1736	19	1888	19	1774	19
	MEAN		3376		3016		4264		2995		3413	
	LSD(.05)		781		593		864		670		480	
	C.V.		7.1		7.7		8.4		10.0		8.5	

Table 4. Continued.

C.I. OR SEL. NO.	ENTRY NO.	LINCOLN NEBRASKA		CLAY CENTER NEBRASKA		ALLIANCE NEBRASKA		NEBRASKA STATE MEAN		CLOVIS (IRR.) NEW MEXICO		CLOVIS (DRYL.)* NEW MEXICO		FARMINGTON NEW MEXICO		NEW MEXICO STATE MEAN	
TXGH10563B	11	3608	4	3252	3	4933	1	3931	2	6261	2	4224	1	6276	10	6268	4
TXGH13622	13	3647	2	3149	4	4568	5	3788	4	6540	1	3915	2	6130	11	6335	3
TX84V1317	14	3842	1	3518	1	4749	4	4036	1	5827	6	2783	8	6482	7	6154	5
TX81V6582-2	10	3367	8	2835	10	4815	3	3672	6	4673	17	2327	17	6626	5	5649	11
TX81V6607-2	15	3144	13	2939	8	4417	9	3500	8	5177	12	2579	14	6095	12	5636	12
CI17826	3	3517	6	3090	5	4831	2	3813	3	6101	4	3881	3	6088	13	6095	7
TX84V1336	12	3308	10	2636	13	4289	13	3411	11	5211	11	2754	10	7029	1	6120	6
OK84343	4	3569	5	2094	18	4259	14	3307	14	5405	8	2680	13	5282	17	5344	17
C0830027	21	3248	11	2742	12	4431	8	3474	9	6182	3	2773	9	6983	2	6583	1
C0830034	22	3647	2	2964	7	4513	6	3708	5	6079	5	3403	5	6980	3	6530	2
Bounty-122	38	2785	16	2548	15	4399	10	3244	15	5643	7	3160	6	6509	6	6076	8
KS82C2338	25	2921	14	2867	9	4453	7	3413	10	4980	14	2307	18	5712	14	5346	16
XW141	34	2681	17	2976	6	4315	12	3324	13	5150	13	2570	15	6726	4	5938	9
NE82533	26	2900	15	3312	2	4351	11	3521	7	4774	16	2271	19	6360	9	5567	13
TXGH10989	9	3169	12	1857	19	4119	15	3048	17	5323	10	2736	12	5551	15	5437	14
KS84HW196	24	3368	7	2377	17	3852	18	3199	16	4328	19	2748	11	4744	19	4536	19
CI13996	2	3339	9	2816	11	3878	17	3344	12	5331	9	3699	4	5480	16	5405	15
C082009	20	2569	18	2552	14	3968	16	3030	18	4979	15	3127	7	6374	8	5677	10
CI1442	1	2468	19	2466	16	3178	19	2704	19	4425	18	2448	16	5096	18	4760	18
MEAN		3216		2790		4332		3446		5389		2968		6133		5761	
LSD(.05)		736		N.S.		595		508		N.S.		N.S.		1171		N.S.	
C.V.		12.2		14.6		8.0		11.1		11.2		18.3		13.1		12.6	

* Not included in state or regional averages.

Table 4. Continued.

C.I. OR SEL. NO.	ENTRY NO.	HUTCHINSON* KANSAS		HAYS KANSAS		MANHATTAN KANSAS		GARDEN CITY KANSAS		KANSAS STATE MEAN		PRESHO S. DAKOTA		AMES IOWA		URBANA ILLINOIS	
TXGH10563B	11	2382	6	3640	2	4292	4	2590	2	3507	3	2889	2	3303	9	5495	1
TXGH13622	13	2423	5	3762	1	4642	2	2727	1	3711	1	3136	1	4027	4	5318	2
TX84V1317	14	2148	8	3405	7	5050	1	2395	4	3617	2	2168	12	3170	11	4609	8
TX81V6582-2	10	2746	1	3578	3	3757	11	2380	5	3238	6	2511	5	2148	18	4366	11
TX81V6607-2	15	2712	2	3452	6	4040	8	2457	3	3316	5	2106	14	2248	17	3357	18
CI17826	3	1696	16	3498	5	3409	14	2262	6	3056	9	2348	9	4187	2	5174	3
TX84V1336	12	1656	17	3231	11	3959	9	2151	7	3114	8	2004	17	3172	10	3884	15
OK84343	4	2549	3	3561	4	4342	3	2096	12	3333	4	1994	18	2738	16	4883	4
C0830027	21	2187	7	3158	13	3802	10	2118	10	3026	10	2547	4	3515	5	4560	9
C0830034	22	1967	12	3296	9	3660	12	2011	13	2989	11	2379	8	3475	6	4168	13
Bounty-122	38	1866	14	3231	11	3320	16	1779	17	2777	16	1885	19	3151	12	4511	10
KS82C2338	25	2494	4	3123	14	4137	6	2144	8	3135	7	2058	16	2904	13	4773	5
XW141	34	1908	13	2759	17	4169	5	1758	18	2895	15	2271	10	3423	7	4755	6
NE82533	26	1574	18	2905	16	4050	7	1799	16	2918	14	2492	6	4156	3	4749	7
TXGH10989	9	2120	9	3376	8	3323	15	2131	9	2944	12	2258	11	2037	19	4093	14
KS84HW196	24	2009	11	3296	9	3507	13	1964	15	2922	13	2165	13	2823	14	4337	12
CI13996	2	1729	15	3032	15	2965	17	1964	14	2654	17	2757	3	4220	1	3501	17
C082009	20	2011	10	2648	18	2930	18	2112	11	2563	18	2396	7	2745	15	3641	16
CI1442	1	1369	19	2039	19	2151	19	1556	19	1915	19	2059	15	3380	8	3169	19
MEAN		2081		3210		3763		2126		3033		2332		3201		4386	
LSD(.05)		N.S.		452		1025		N.S.		589		608		N.S.		N.S.	
C.V.		13.8		8.9		12.0		11.6		11.2		20.4		15.5		10.2	

* Not included in state or regional averages.

Table 4. Concluded.

C.I. OR SEL. NO.	ENTRY NO.	STILLWATER OKLAHOMA		ALTUS OKLAHOMA		LAHOMA OKLAHOMA		GOODWELL OKLAHOMA		OKLAHOMA STATE MEAN		JULESBURG COLORADO		ABERDEEN IDAHO		LIND* WASHINGTON		REGIONAL AVERAGE	
TXGH10563B	11	2610	10	2562	4	3319	9	4776	5	3317	7	2218	2	7148	1	1488	5	4031	1
TXGH13622	13	2940	4	2313	10	3080	14	4296	13	3157	11	2119	4	6208	8	1441	7	3999	2
TX84V1317	14	3602	1	2719	2	3937	2	4710	7	3742	2	1460	17	6340	7	1122	17	3982	3
TX81V6582-2	10	2631	9	2406	8	3584	5	4793	3	3354	5	1773	10	6674	5	1182	14	3750	4
TX81V6607-2	15	2897	5.	2266	12	3812	3	4820	2	3449	4	1717	11	6801	4	1184	13	3743	5
CI17826	3	2242	15	2242	14	2976	15	4370	11	2958	14	2138	3	6827	3	1430	8	3729	6
TX84V1336	12	2646	8	2647	3	3805	4	4765	6	3466	3	1132	18	6620	6	1444	6	3723	7
OK84343	4	3120	2	3185	1	4202	1	4792	4	3825	1	1873	7	5748	11	1142	15	3703	8
C0830027	21	2479	11	2214	15	3578	6	4426	9	3174	10	1539	16	5173	16	1283	10	3694	9
C0830034	22	2679	7	2257	13	3081	13	3715	18	2933	15	1625	14	6080	9	1729	2	3614	10
Bounty-122	38	2382	13	2429	6	3303	10	4672	8	3197	9	2002	5	6933	2	1407	9	3614	11
KS82C2338	25	2970	3	2509	5	3543	7	4345	12	3342	6	2308	1	5627	13	1218	12	3574	12
XW141	34	1970	18	2425	7	3096	12	4858	1	3087	12	1609	15	5726	12	961	19	3452	13
NE82533	26	2263	14	1974	17	2771	16	3953	16	2740	16	1777	9	5490	15	1280	11	3436	14
TXGH10989	9	2788	6	2393	9	3342	8	4390	10	3228	8	1823	8	5580	14	1126	16	3431	15
KS84HW196	24	2383	12	2286	11	3177	11	4028	14	2968	13	1686	13	4680	18	1015	18	3242	16
CI13996	2	1991	17	2183	16	2752	17	4023	15	2737	17	1925	6	4767	17	1726	3	3237	17
C082009	20	2006	16	1930	18	2712	18	3935	17	2646	18	1702	12	5790	10	1801	1	3143	18
CI1442	1	1349	19	1137	19	1726	19	2972	19	1796	19	821	19	3191	19	1586	4	2394	19
MEAN		2524		2320		3252		4350		3111		1750		5863		1346		3552	
LSD(.05)		N.S.		459		911		661		472		N.S.		N.S.		N.S.		316	
C.V.		11.3		9.3		5.4		9.4		9.2		14.9		14.3		16.2		12.3	

* Not included in regional averages.

Table 5. Mean yield, regression coefficient, correlation coefficient, and coefficient of determination from linear regression analysis of variety mean yield on nursery mean yield for the 45 entries in the 1988 Southern Regional Performance Nursery grown at 26 locations.

C.I. OR SEL. NO.	ENTRY NO.	MEAN YIELD OVER 26 LOCATIONS KG/HA	REGRESSION COEFFICIENT (b)	CORRELATION COEFFICIENT (r)	COEFFICIENT OF DETERMINATION (r^2)
TXGH13622	13	3798	1.07	0.94	0.89
TXGH10563B	11	3757	1.14	0.96	0.92
AGC-112	32	3730	1.02	0.95	0.90
XH675	36	3667	1.12	0.98	0.96
TX84V1336	12	3662	1.16	0.96	0.93
XW161	35	3657	1.14	0.97	0.94
TX87HA1	45	3649	1.01	0.95	0.91
RL844677	30	3639	1.06	0.97	0.94
XH685	37	3598	1.11	0.98	0.95
OK86215	8	3590	1.04	0.97	0.94
TX84V1317	14	3587	1.19	0.98	0.96
IL80-1251	44	3507	1.02	0.97	0.94
OK84286	5	3505	1.05	0.95	0.91
NA-W83-256	41	3494	0.98	0.98	0.95
NE82656	29	3449	0.84	0.92	0.85
TX86A7041	17	3443	1.12	0.94	0.88
TX81V6607-2	15	3434	1.05	0.82	0.67
NE83407	28	3425	0.87	0.94	0.88
CO830027	21	3424	1.13	0.97	0.95
CO830034	22	3420	1.01	0.95	0.90
AGC-113	33	3420	1.00	0.90	0.80
CI17826	3	3417	1.00	0.94	0.89
NA-W81-162-W	42	3408	1.07	0.98	0.97
RL845472	31	3405	0.82	0.94	0.89
TX81V6582-2	10	3365	1.06	0.88	0.77
OK84287	6	3361	1.04	0.95	0.91
TX84V1736	16	3355	1.03	0.95	0.89
KS82C2338	25	3354	0.94	0.98	0.95
TX86V1110	19	3349	0.99	0.96	0.91
	27	3346	0.86	0.96	0.93
	18	3342	0.97	0.97	0.93
	39	3336	1.10	0.95	0.91
	4	3300	1.06	0.90	0.80
	7	3278	0.91	0.96	0.91
	40	3268	1.09	0.94	0.87
	43	3210	0.88	0.93	0.86
	26	3187	0.83	0.92	0.85
		3181	1.07	0.90	0.81
		3134	1.07	0.96	0.92
		3074	1.10	0.95	0.90
		3044	0.69	0.92	0.84
		2984	0.78	0.89	0.78
		2973	0.92	0.93	0.87
		905	0.86	0.93	0.86
		270	0.73	0.84	0.71

Table 6. Mean yield, regression coefficient, correlation coefficient, and coefficient of determination from linear regression analysis of variety mean yield on nursery mean yield for the 19 entries in the 1987 and 1988 Southern Regional Performance Nurseries grown at 21 locations.

C.I. OR SEL. NO.	ENTRY NO.	MEAN YIELD OVER 21 LOCATIONS KG/HA	REGRESSION COEFFICIENT (b)	CORRELATION COEFFICIENT (r)	COEFFICIENT OF DETERMINATION (r^2)
TXGH10563B	11	4031	1.08	0.96	0.92
TXGH13622	13	3999	0.98	0.95	0.90
TX84V1317	14	3982	1.04	0.96	0.92
TX81V6582-2	10	3750	1.15	0.92	0.85
TX81V6607-2	15	3743	1.13	0.90	0.81
CI17826	3	3729	1.08	0.95	0.90
TX84V1336	12	3723	1.09	0.93	0.87
OKB4343	4	3703	0.98	0.91	0.82
COB30027	21	3694	1.08	0.96	0.92
COB30034	22	3614	1.04	0.95	0.90
Bounty-122	38	3614	1.21	0.96	0.93
KS82C2338	25	3574	0.90	0.96	0.93
XW141	34	3452	1.09	0.95	0.89
NE82533	26	3436	0.93	0.93	0.86
TXGH10989	9	3431	1.00	0.94	0.88
KS84HW196	24	3242	0.79	0.92	0.85
CI13996	2	3237	0.78	0.88	0.78
COB2009	20	3143	0.98	0.95	0.90
CI1442	1	2394	0.69	0.7?	

Table 7. Summary of agronomic and yield data for 45 wheats in the 1988 Southern Regional Performance Nursery.

VARIETY OR PEDIGREE	C.I. OR SEL. NO.	ENTRY NO.	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	DAYS TO RIPENING FROM 1/1	LODGING %
Number of Trials			26	21	2	3
TX71A562-6*4/Amigo*4//Largo	TXGH13622	13	77	134	182	21
TAM-105*4/Amigo*4//Largo	TXGH10563B	11	77	132	181	12
HRW Selection	AGC-112	32	76	133	179	13
Winter Wheat Hybrid	XH675	36	82	134	181	4
KS73146/TX71A1039	TX84V1336	12	72	132	181	10
TAM W-101/W603//W558	XW161	35	68	131	178	0
MUST/3/T-105*4/AMI*4//LARGO, TXGH10289	TX87HA1	45	80	133	182	3
Winter Wheat Line	RL844677	30	83	136	183	5
Winter Wheat Hybrid	XH685	37	82	134	181	5
OK79257/Century Sib/2/Chisholm	OK86215	8	75	132	180	8
TX71A374-4/TX71A1039-V1	TX84V1317	14	71	133	180	13
TX69A330/IL76-3820	IL80-1251	44	78	136	179	3
Payne*2/C0725052	OK84286	5	74	134	180	6
Payne/W78-069	NA-W83-256	41	77	135	182	12
Brule/3/Parker*4/Agent//Belot.198/Lcr	NE82656	29	79	137	181	5
TAM-108/Arkan	TX86A7041	17	71	136	179	7
TX71A1039-V1*3/Amigo	TX81V6607-2	15	69	134	181	11
Complex Pedigree	NE83407	28	74	137	181	4
74cb462/Trapper//Vona	C0830027	21	81	134	182	22
C05926//7C/Tobari 63/3/Baca	C0830034	22	83	137	182	9
HRW Selection	AGC-113	33	79	137	182	18
TAM-105	CI17826	3	75	134	180	7
OK11252A/W79-1226	NA-W81-162-W	42	70	134	188	3
Winter Wheat Line	RL845472	31	80	136	180	8
Sturdy*3/Amigo	TX81V6582-2	10	69	132	180	11
Payne*2/C0725052	OK84287	6	74	134	182	5
TAM-106 resel./TX69D4819	TX84V1736	16	68	132	185	21
Bulk Selection	KS82C2338	25	76	133	179	4
Rannaya/NE701136//CI13449/Ctk	TX86V1110	19	82	133	178	23
Wrr/Sut//MoW6811/3/Aga S/4/NE68457/Ctk78	NE84557	27	83	137	180	14
Rannaya/NE701136//CI13449/Ctk	TX86V1109	18	82	133	177	26
Bounty Hybrid Wheat	WH180001	39	81	136	181	5
Aurora/2*TAM W-101	OK84343	4	73	135	180	1
Hawk/OK80099	OK86197	7	76	133	179	26
W79-227/Payne	NA-W84-229	40	71	135	182	0
IL77-4259/IL76-3845	IL83-7439	43	80	136	180	16
KS73167/Agate//Sage sib	NE82533	26	79	137	181	2
TAM W-101*4/Amigo*4//Largo	TXGH10989	9	73	134	182	29
Bounty Hybrid Wheat	Bounty-122	38	76	134	183	3
Bezostaya/TAM W-101//W558	XW141	34	69	136	182	2
Scout 66	CI13996	2	90	136	180	30
Bsn/Strlng//3*Sut/3/Eag/4/Pinnacle/2*Eag	KS84HW196	24	74	133	186	21
74cb452/Vona//Baca	C0830014	23	85	134	181	6
74F878/Wings//Vona	C082009	20	82	138	184	17
Kharkof	CI1442	1	92	142	185	35

Table 7. Concluded.

C.I. OR SEL. NO.	ENTRY NO.	WINTER SURVIVAL %	STRAW STRENGTH 1-5	LEAF RUST SEVERITY %	SEPTORIA 0-9	BYD VIRUS 0-9	MILDEW %	VOLUME WEIGHT KG/HL	YIELD KG/HA
Number of Trials		3	1	5	1	2	1	25	26
TXGH13622	13	60	3	31	7	6	0	75.6	3798
TXGH10563B	11	66	3	30	6	7	0	74.2	3757
AGC-112	32	81	2	35	7	7	0	74.1	3730
XH675	36	58	3	15	6	5	0	74.3	3667
TX84V1336	12	53	3	11	7	7	5	75.3	3662
XW161	35	66	1	3	6	5	20	74.6	3657
TX87HA1	45	73	3	22	6	7	0	75.4	3649
RL844677	30	62	3	5	6	6	0	75.6	3639
XH685	37	67	3	13	7	5	50	73.7	3598
OK86215	8	65	2	15	7	6	0	75.2	3590
TX84V1317	14	42	3	7	7	7	5	76.3	3587
IL80-1251	44	72	3	8	6	6	0	74.4	3507
OK84286	5	64	3	14	6	5	60	75.6	3505
NA-W83-256	41	63	2	19	6	5	60	73.8	3494
NE82656	29	77	3	4	6	5	0	72.6	3449
TX86A7041	17	64	3	4	6	6	0	71.3	3443
TX81V6607-2	15	4	3	6	6	5	0	78.1	3434
NE83407	28	69	3	19	6	5	0	72	3425
C0830027	21	47	4	15	7	6	0	76.9	3424
C0830034	22	54	3	28	7	6	0	74.7	3420
AGC-113	33	76	4	22	7	6	0	71.8	3420
CI17826	3	69	2	35	7	7	25	73.4	3417
NA-W81-162-W	42	50	2	9	6	6	60	75.5	3408
RL845472	31	71	4	6	6	6	0	76.1	3405
TX81V6582-2	10	17	2	17	5	7	0	76.9	3365
OK84287	6	62	2	15	6	4	0	75.8	3361
TX84V1736	16	61	2	14	6	7	0	75.6	3355
KS82C2338	25	51	3	27	6	7	0	76.4	3354
TX86V1110		71	3	5	7	6	5	73.3	3349
NE84557		52	2	9	7	6	0	76.4	3346
TX86V1109		69	3	4	6	6	10	74.6	3342
WH180001		41	3	12	5	5	0	73.9	3336
OK84343		36	2	7	6	5	0	74.5	3300
OK86197		57	3	19	6	6	40	75.1	3278
NA-W84-229		18	1	9	6	7	50	74.8	3268
IL83-7439			1	5	6	6	0	74.9	3210
NE82533			3	20	6	6	0	75	3187
TXGH10989			3	20	5	4	0	73.6	3181
Bounty-122			2	24	7	7	50	71.8	3134
XW141			2	7	6	7	0	71.2	3074
CI13996			5	27	6	7	5	75.8	3044
KS84HW196			2	22	8	7	0	76.3	2984
C0830014			2	26	6	7	0	75.3	2973
C082009			2	16	7	6	0	75.7	2905
CI1442			5	28	6	6	10	73.2	2270

of entries of the 1988 Southern Regional Performance Nursery to
of Puccinia graminis f.sp. tritici (by D. V. McVey, U.S.D.A., A.R.S.,
atory, U. of MN, St. Paul, MN).

No.	Name or sel. no.	Reaction produced by isolates						Spec. sr gene
		69-21-399 QFBS	71-21-584B QSHS	72-25-639C RHRS	72-00-53A RKQS	72-01-4A RTQQ	74-21-1409A TNMH	TNMK
		151		11-32-113		15B-2		
1	Kharkof	s	s	s	s	s	s	none
2	Scout 66	s	s	s	s	;1n	;1n	s	17
3	TAM-105	32	2	23	23	23	s	s	Tme
4	OK84343	;1	2=	;1	;1	2=	2=	2=	31
5	OK84286	;1	2=	;1	;1	2=	2	2-	+
6	OK84287	;1	2=	;1	;1	2=	2	2=	+
7	OK86197	;,2	2=	2=	2=	2=	2=,;	2=,;	Seg.6
8	OK86215	2	2=	2=	2=	2=	2	2=	none
9	TXGH10989	2=	2-	2=	2=	2=	2-	2=	Amigo
10	TX81V6582-2	1	2=	2=	2=	2=	2-	2=	Amigo
11	TXGH10563B	2=	2-	2-	2=	2=	2-	2=	Amigo
12	TX84V1336	s	s	s	s	s	s	s	none
13	TXGH13622	2=	2=	2=	2=	;1-,xcn	;	2=	Amigo,Seg.17
14	TX84V1317	s	s	s	s	s	s	s	none
15	TX81V6607-2	2=	2=	2=	2=	2=	2-	2=	Amigo
16	TX84V1736	s	s	s	s	;1-n	;1n	s	17
17	TX86A7041	;1	2=	2=	;1-	2=	;	;,2-	6,24
18	TX86V1109	s	s	s	s	s	s	s	none
19	TX86V1110	s	s	s	s	s	s	s	none
20	C082009	--	2	2-	2-	;	;	2	17,+
21	C0830027	;	23	;1	;1	;1-n	;	x,s	11,17
22	C0830034	;	s	;1	;1	;	;1	s	11,17
23	C0830014	;	s	;1	;	;	;	s	11,17
24	KS84HW196	s	s	s	s	s	s	s	none
25	KS82C2338	;	s	s	s	;	;	;,s	6,17

Table 8. Continued.

No.	Name or sel. no.	Reaction produced by isolates: 72-00-1370C QFBS	69-21-399 QSHS	71-21-584B RHRS	72-25-639C RKQS	72-00-53A RTQQ	72-01-4A TNMH	74-21-1409A TNMK	Spec. sr gene
		151		11-32-113			15B-2		
26	NE82533	2=	2=	2-	2=	;	;	2-	17,24
27	NE84557	;	2=	2=	2=	;	;	;	6,17,24
28	NE83407	;	2-	2=	2	;	;	;	6,17,24
29	NE82656	;	2=cn	2=cn	2	;	;	;	6,17,24
30	RL844677	23	s	s	s	;	;	23	17
31	RL845472	2	2	2	2	;	;	2	17,+
32	AGC-112	2=	2	2	2=	2=	2=	2=	+
33	AGC-113	;	2-	2	23	;	;	;	6,17,+
34	XW-141	2	2	2	2	23	23	23	none
35	XW-161	2=	2-	2-	2-	;	;	s	17,Tmp
36	XH-675	2=	2-	2-	2-	2-	2	2	24 or 31
			s	x	2	2	x,s	s	none
			2-	2=	2-	2=	;1	;	6,+
			2-cn	2-cn	23	xcn	;1n	;	6+
			2	x	;	2=	32	23	+
			2	2-	2-	2-	;	;	6,17
			2-	;1	2=	2-	32	23	+
			2-	2=	2=	;	;	2=	17
			s	s	s	s	s	s	none
			23	x,s	23	2-	;1-	;	6,Amigo

Table 9. Adult plant field reaction of entries of the 1988 Southern Regional Performance Nursery to *Puccinia graminis* f.sp. *tritici* (by D. V. McVey, U.S.D.A., A.R.S., Cereal Rust Laboratory, U. of MN, St. Paul, MN).

No.	Name or sel. no.	Stem rust 6/22
1	Kharkof	TS
2	Scout 66	TS
3	TAM-105	10S
4	OK84343	0
5	OK84286	TR
6	OK84287	TR
7	OK86197	TR
8	OK86215	TR
9	TXGH10989	TR
10	TX81V6582-2	TR
11	TXGH105638	TR
12	TX84V1336	TR
13	TXGH13622	TR
14	TX84V1317	30S
15	TX81V6607-2	TR
16	TX84V1736	10S
17	TX86A7041	TR
18	TX86V1109	5MS-S
19	TX86V1110	5MS-S
20	CO82009	TR
21	CO830027	TR
22	CO830034	TS
23	CO830014	TS
24	KS84HW196	TR
25	KS82C2338	TR
26	NE82533	TR
27	NE84557	TR
28	NE83407	TR
29	NE82656	0
	RL844677	TMR
	RL845472	TMR
	AGC-112	TR
	AGC-113	TS
	XW-141	TS
	XW-161	10S
	XH-675	10S
	XH-685	20S
	Bounty 122	5MS-S
	WH180001	20S
	NA-W84-229	0
	NA-W83-256	0
	NA-W81-162W	0
	IL83-7439	TR
	IL80-1251	10S
	TX87HAI	TR

Table 10. Hessian fly reaction, Great Plains biotype, 1988 Southern Regional Performance Nursery. (Data provided by J. H. Hatchett, USDA-ARS, Manhattan, KS.)

ENTRY NO.	C.I. OR SEL. NO.	REACTION TYPE	NO. OF PLANTS R	S
1	CI1442	S		
2	CI13996	S		
3	CI17826	S		
4	OK84343	S		
5	OK84286	H	9	14
6	OK84287	H	7	13
7	OK86197	H	6	11
8	OK86215	S		
9	TXGH10989	S		
10	TX81V6582-2	S		
11	TXGH10563B	S		
12	TX84V1336	S		
13	TXGH13622	S		
14	TX84V1317	S		
15	TX81V6607-2	S		
16	TX84V1736	S		
17	TX86A7041	S		
18	TX86V1109	S		
19	TX86V1110	S		
20	CO82009	H	8	16
21	CO830027	S		
22	CO830034	S		
23	CO830014	S		
24	KS84HW196	S		
25	KS82C2338	S		
26	NE82533	H	5	16
27	NE84557	H	8	13
28	NE83407	H	5	17
29	NE82656	R		
30	RL844677	H	7	20
31	RL845472	H	19	3
32	AGC-112	S		
33	AGC-113	S		
34	XW141	S		
35	XW161	H	17	7
36	XH675	S		
37	XH685	S		
38	Bounty-122	S		
39	WH180001	S		
40	NA-W84-229	H	5	21
41	NA-W83-256	S		
42	NA-W81-162-W	S		
43	IL83-7439	S		
44	IL80-1251	H	10	13
45	TX87HA1	S		

Table 11. Virus reactions of entries in the 1988 Southern Regional Performance Nursery. (Data provided by A. D. Hewings and F. L. Kolb, Urbana, Illinois.)

ENTRY NO.	C.I. OR SEL. NO.	BARLEY YELLOW DWARF 0-9	SOILBORNE MOSAIC 0-9	
			Rep 1	Rep 2
1	CI1442	4	8	7
2	CI13996	6	8	7
3	CI17826	4	7	8
4	OK84343	3	7	6
5	OK84286	4	8	6
6	OK84287	4	8	7
7	OK86197	5	4	3
8	OK86215	7	8	8
9	TXGH10989	6	8	7
10	TX81V6582-2	4	8	7
11	TXGH10563B	6	8	7
12	TX84V1336	5	7	6
13	TXGH13622	4	6	5
14	TX84V1317	5	6	5
15	TX81V6607-2	4	8	8
16	TX84V1736	8	8	7
17	TX86A7041	5	6	7
18	TX86V1109	6	7	7
19	TX86V1110	5	8	7
20	CO82009	5	8	8
21	CO830027	6	9	8
22	CO830034	6	8	6
23	CO830014	7	8	8
24	KS84HW196	7	7	8
25	KS82C2338	7	5	4
26	NE82533	6	4	3
27	NE84557	6	5	5
28	NE83407	4	6	7
29	NE82656	5	7	6
30	RL844677	6	2	4
31	RL845472	7	8	7
32	AGC-112	6	8	7
33	AGC-113	6	2	4
34	XW141	7	3	6
35	XW161	4	2	5
36	XH675	7	6	6
37	XH685	4	6	6
38	Bounty-122	4	8	8
39	WH180001	6	6	6
40	NA-W84-229	6	5	5
41	NA-W83-256	6	4	4
42	NA-W81-162-W	7	3	3
43	IL83-7439	6	3	3
44	IL80-1251	6	7	7
45	TX87HA1	6	5	5

Table 12. Aluminum tolerance of lines tested in the 1988 SRPN based on hematoxylin staining of seedling roots. (Data provided by B.F. Carver, Stillwater, OK)

Entry No.	Selection No.	Stain Intensity[a] Al Concentration (mM) 0.18	0.36	0.72	Rating[b]
1	Kharkof	C	C	C	VS
2	Scout 66	C	C	C	VS
3	TAM 105	C	C	C	VS
4	OK84343	P	P	C	I
5	OK84286	P	C	C	MS
6	OK84287	P	C	C	MS
7	OK86197	P	C	C	MS
8	OK86215	P	P	C	I
9	TXGH10989	P	P	C	I
10	TX81V6582-2	P	C	C	MS
11	TXGH10563B	C	C	C	VS
12	TX84V1336	N	P	P	T
13	TXGH13622	P/C/N	C/P	C	VS-I*
14	TX84V1317	N	P	P	T
15	TX81V6607-2	N	P	P	T
16	TX84V1736	P/C/N	P/C	P/C	VS-T*
17	TX86A7041	C	C	C	VS
18	TX86V1109	P	P	P	T
19	TX86V1110	N	P	P	T
20	C082009	P	C/P	C	MS-I*
21	C0830027	P	C	C	MS
22	C0830034	P	C/P	C	MS-I*
23	C0830014	P	C	C	MS
24	KS84HW196	C/P	C/P	C	VS-I*
25	KS82C2338	P/C	C/P	C	VS-I*
26	NE82533	C	C	C	VS
27	NE84557	C/P	C	C	VS-MS*
28	NE83407	C	C	C	VS
29	NE82656	P	C	C	MS
30	RL844677	P	P/C	C	MS-I*
31	RL845472	C	C	C	VS
32	AGC-112	C	C	C	VS
33	AGC-113	P	C/P	C	MS-I*
34	XW141	N	N	P	T
35	XW161	N	N	P	T
36	XH675	P	C	C	MS
37	XH685	P	C	C	MS
38	Bounty-122	N	N	P	T
39	WH180001	N	P	P	T
40	NA-W84-229	P	P	P	T
41	NA-W83-256	N/P	P/C	P/C	MS-T*
42	NA-W81-162-W	P	P	C	I
43	IL83-7439	N/P	P	C/P	I-T*
44	IL80-1251	N	P	P	T
45	TX87HA1	P	P	P	T

[a]C, P, and N = complete, partial, and no staining of root tips, respectively.

[b]VS = very susceptible, MS = moderately susceptible, I = intermediate and T = tolerant ($\leq$ 0.72 mM Al); * = heterogeneous response; predominant stain intensity listed first for each Al concentration.

1988
Northern Regional Performance Nursery

Entry No.	Variety or Pedigree	Sel. No.	Source
1**	Kharkof	CI1442	Check
2**	Roughrider	CI17439	"
3**	Colt	PI476975	"
4	CI15322//Agate/4*Scout 66/3/Ctk 78/4/SD74221	SD82144	So. Dakota
5	CI15322//3*(Agent/4*Scout66)	SD76463-16	"
6	SD74221*2/Lathrop	SD82114	"
7	SD76109/Rose	SD78207-4	"
8	SD76669*2/KS71591	SD791231	"
9	Rrr//Yogo/Trapper	ND8212	No. Dakota
10	Rrr/3/Froid//Winoka/WW8	ND8215	"
11	Rrr*2/1809	ND8286	"
12	Ctk/3/Froid*2//ND363/ND269	ND8407	"
13*	Rrr/FO.1527	ND8460	"
14	Brule/3/Parker*4/Agent//Belot.198/Lcr	NE82656	Nebraska
15	HiPlains/Wings/3/Pkr*4/Agent//Belot.198/Lcr	NE82438	"
16*	(FTN/MI/Hope)//Pnc/2*Cnn/3/Pnc/3*Cnn/4/ Pnc/2*Cnn//ILL#1-Cns-TTi (CTMH)/ Sando60/5/Vona/6/Wrr*5/Agent//Kavkaz	NE83432	"
17*	Bez 1/Ctk78//Arthur/Ctk78/3/Bennett	NE84581	"
18	OK11252A/W76-1226 (Abilene)	NA-81-362-5	NAPB
19*	Winter Wheat Hybrid	XH947	HybriTech
20*	" "	XNH1354	"
21	Kharkov 22 MC/Bezostaya 1	WT176	Lethbridge
22	Norstar/Rrr	WT177	"
23	"	WT179	"
24	Turkey/Burt//Bezostaya 1	ID0180	"
25*	Hgl/ID5006/4/II-60-156/CI14107//It/3/ 2Cnn/PI178383	ID0301	Idaho
26	Lancota/Froid//NE69559/Wnk	MT8039	Montana

* New Entry in 1988
** New Seed Provided

TEST SITE INFORMATION - NRPN

Clovis, NM -- See information for SRPN.

Nebraska stations -- See information for SRPN.

Brookings, SD -- See information for SRPN.

Presho, SD -- See information for SRPN.

Highmore, SD -- Seeded on 9/9/87 into fallowed land with good moisture. A mild winter allowed for 100% survival. April, May, June, and July were extremely hot and dry. Leaf rust was present at 10 to 20% severity on susceptible cultivars. WSMV was present and notes were taken on general plant appearance. Harvested on 7/11/88.

Casselton, ND -- The nursery was planted on 9/9/87. Some winterkill was recorded due to cold temperatures and uneven snow cover. Dry conditions were experienced from planting through harvest with less than 40% of normal precipitation received from April through July.

Carrington, ND -- The nursery was planted on 9/4/87 into standing small grain stubble. Along with some winterkill, there was severe drought during the growing season. The average yield at this location was 6 bu/a.

Williston, ND -- All varieties had 100% fall stand establishment and no winterkill. There were no disease, weed, or insect problems. The drought severely affected yields. There were 21 days in June with maximum daily temperatures 90 degrees or above. Two inches of the total June rainfall of 3.02 inches was received on June 30 and did very little to enhance grain production. June was the only month in which rains of greater than 0.33 inches occurred.

Rosemount, MN -- Planted on 9/9/87 and harvested 7/8/88. Plots were variable due to severe drought and heat and a spotty fall infection of BYDV. There was no winterkill. Heat pushed grain fill very fast and little moisture was available in June (0.22 inches). Temperatures were near or over record highs on many days with relatively low humidity. No other diseases were noted.

Waseca, MN -- Planted on 9/8/87 and harvested 7/6/88. There was less BYDV infection than at Rosemount and it was scattered and not severe. More precipitation was received but temperatures were just as severe when compared to Rosemount.

Sheridan, WY -- The nursery was seeded into a tilled seed bed and no fertilizer was applied. The soft ground resulted in sliding of the wheel driving the seed distributor. An inadequate stand resulted in three plots. Below normal precipitation dramatically affected yields. No insect or disease problems were noted.

Archer, WY -- The nursery was planted into a no-till chemical fallow area with a no-till plot drill. Fertilizer at 40-20-0 lbs/a rate was deep band applied at planting time. Very little moisture was received throughout the fall which affected emergence and stand establishment. The moisture received throughout the spring and summer was above average and timely. Temperatures were above normal beginning in early June and remained high until harvest. There was no insect or disease damage to the nursery. The Russian wheat aphid, which caused extensive damage the previous year, was not a problem.

Moccasin, MT -- All entries survived the winter with excellent stands. Cool moist conditions during April and the first two weeks of May produced succulent growth. Drought stress from May 15 through June 15 with high temperatures and strong south winds significantly reduced yields. Powdery mildew was the only disease or insect problem observed this year. Russian wheat aphids and green bugs arrived too late to affect small grain yields.

Sidney, MT -- Diseases and insects were not a problem. There was good soil moisture to a depth of 18 inches at planting time, resulting in good emergence and stand establishment. Winter survival was excellent. Persistent hot, dry, and windy conditions throughout the spring and summer growing periods reduced tillering, plant height, and yields drastically. Protein levels of harvested grain were very high due to the drought. Maturity was 2-3 weeks ahead of normal. A total of 6.18 inches of precipitation was received during the growing season compared to the long term average of 13.53 inches.

Bozeman, MT -- No information.

Idaho stations -- See information for SRPN.

Lind, WA -- See information for SRPN.

Table 13. Yield and agronomic data for entries in the 1988 Northern Regional Performance Nursery.

CLOVIS (IRR.)

NEW MEXICO

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	LEAF RUST SEV. %	LEAF RUST RESP. 0-9
MT8039	26	4643	65.3	90	134	30	
XNH1354	20	4641	67.5	81	139	27	
XH947	19	4528	65.6	80	137	9	
SD82114	6	4510	67.9	92	137	10	
PI476975	3	4439	67.3	72	137	27	
NE83432	16	4125	68.1	77	139	11	
NA-81-362-5	18	4114	69.2	74	137	9	
NE82656	14	3990	66.5	78	137	7	
ID0301	25	3927	64.6	89	144	20	
NE82438	15	3784	66.5	79	139	13	
SD82144	4	3761	64.5	86	138	15	
SD76463-16	5	3480	67.9	94	140	8	
ND8286	11	3447	67.9	91	141	15	
NE84581	17	3393	68.2	80	142	1	
ND8215	10	3363	71.4	98	143	5	
ND8407	12	3207	66.9	96	139	5	
ND8212	9	3127	69	93	144	27	
CI17439	2	2800	68.8	91	144	17	
SD791231	8	2685	69.9	87	139	4	
ID0180	24	2653	64.5	88	145	14	
SD78207-4	7	2488	68.5	94	144	4	
WT176	21	2449	68.7	98	144	8	
WT179	23	2386	67	97	145	10	
CI1442	1	2317	69.7	102	144	10	
WT177	22	2110	69.8	98	144	12	
ND8460	13	1845	69.1	97	144	2	
MEAN		3393					
LSD(.05)		930					
C.V.		16.7					

CLOVIS (DRYL.)

NEW MEXICO

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	LEAF RUST SEV. %	LEAF RUST RESP. 0-9
NE84581	17	2276	64.4	63	134	1	
ID0301	25	2216	68.4	60	137	9	
SD82114	6	2121	66.4	59	134	1	
XNH1354	20	2088	66.6	59	137	18	
XH947	19	2060	65.9	54	134	7	
ND8215	10	2023	62.8	66	138	1	
SD76463-16	5	1893	66.7	61	134	2	
NE82656	14	1874	65.6	62	134	2	
CI1442	1	1850	64.3	76	137	15	
PI476975	3	1745	67.3	56	134	5	
NA-81-362-5	18	1735	72.2	55	134	1	
ND8286	11	1709	64.1	63	137	2	
ND8212	9	1688	61.6	65	138	17	
SD78207-4	7	1635	62.7	61	137	2	
NE83432	16	1621	66.4	55	137	2	
CI17439	2	1554	63.8	63	137	4	
SD82144	4	1548	64.5	60	134	2	
ND8407	12	1465	64.7	65	137	2	
MT8039	26	1446	59.4	63	134	10	
WT176	21	1426	62.2	62	144	4	
ID0180	24	1419	59.9	57	144	14	
SD791231	8	1376	63.4	64	136	5	
NE82438	15	1300	59.6	54	137	1	
ND8460	13	1298	62.5	68	137	2	
WT179	23	1237	63.6	65	144	2	
WT177	22	963	63.1	59	144	2	
MEAN		1676					
LSD(.05)		N.S.					
C.V.		27.5					

LINCOLN

NEBRASKA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	LEAF RUST SEV. %	LEAF RUST RESP. 0-9
NA-81-362-5	18	4282	81.1	72	138		8
XH947	19	3867	77.8	80	138		8
NE83432	16	3728	77.5	80	141		3
NE84581	17	3596	78.3	80	142		5
NE82656	14	3374	78.7	80	139		2
PI476975	3	3356	78.8	70	138		8
SD82114	6	3347	81.5	91	139		7
SD82144	4	3302	82.4	93	139		8
SD76463-16	5	3297	78.4	91	140		8
ND8215	10	3266	76.1	96	143		8
NE82438	15	3241	78.4	78	139		8
XNH1354	20	3232	75.7	78	140		8
MT8039	26	3141	76.6	86	139		8
ND8407	12	3089	78.7	96	141		5
SD791231	8	2955	80.1	84	140		2
SD78207-4	7	2930	79.2	86	141		2
ND8460	13	2878	79.6	97	143		8
ND8286	11	2867	76.6	87	142		8
CI1442	1	2573	79.5	94	141		5
CI17439	2	2486	77.3	92	144		8
WT179	23	2441	77	90	144		7
ID0180	24	2345	78.6	75	142		5
WT176	21	2291	77.8	91	144		2
ID0301	25	2262	76.1	75	141		7
ND8212	9	2235	73.8	88	142		8
WT177	22	2215	77.5	91	143		8
MEAN		3023					
LSD(.05)		489					
C.V.		9.9					

NORTH PLATTE

NEBRASKA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL
NE84581	17	2873	69.3
NE82656	14	2798	67
XH947	19	2675	62.7
SD76463-16	5	2496	67.1
NA-81-362-5	18	2486	67.2
SD78207-4	7	2443	70.7
SD82114	6	2428	69
MT8039	26	2369	66.4
ND8460	13	2307	69.4
NE82438	15	2255	64
SD791231	8	2232	67.6
CI17439	2	2208	68.1
ND8286	11	2184	65.3
SD82144	4	2158	68.1
ND8407	12	2118	65.4
XNH1354	20	2095	64.1
NE83432	16	2085	65.8
CI1442	1	2066	68.9
ND8212	9	2059	64
PI476975	3	1973	64
WT177	22	1961	68.9
ND8215	10	1827	60.9
WT176	21	1788	63.7
WT179	23	1723	67.1
ID0301	25	1705	63.5
ID0180	24	1671	64
MEAN		2192	
LSD(.05)		403	
C.V.		11.2	

ALLIANCE

NEBRASKA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL
NA-81-362-5	18	4364	77.4
NE83432	16	4163	75.3
XNH1354	20	4031	74.7
NE82438	15	4002	72.9
XH947	19	3982	72.6
MT8039	26	3977	.
ID0301	25	3948	72.2
CI17439	2	3827	76.2
NE84581	17	3773	74.8
SD791231	8	3707	74.2
NE82656	14	3682	74.9
ND8212	9	3600	72.6
ND8215	10	3588	71.2
WT176	21	3472	71
ID0180	24	3412	73.9
ND8286	11	3353	74.9
ND8407	12	3341	74
SD82144	4	3339	76.6
PI476975	3	3335	74.8
SD82114	6	3082	77.4
SD76463-16	5	3057	77.5
SD78207-4	7	3055	76.1
WT177	22	3026	73.5
ND8460	13	2999	77.4
CI1442	1	2961	
WT179	23	2863	

MEAN
LSD(.05)
C.V.

BROOKINGS

S. DAKOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1
NA-81-362-5	18	2836	79.5	63	150
NE82438	15	2526	78.2	65	151
SD76598-7	28	2508	77.5	69	151
SD76463-4	29	2397	78.8	74	150
NE83432	16	2307	78.2	69	152
ND8407	12	2293	73.1	71	151
SD76463-16	5	2282	77.1	78	150
NE84581	17	2275	76.4	68	151
NE82656	14	2180	77.3	68	151
WT177	22	2137	74.9	80	153
ND8215	10	2119	69.3	71	152
PI476975	3	2106	76.2	62	150
ROSE	30	2075	75.1	69	151
SD82102	27	2054	75.5	72	150
XH947	19	2044	77.5	61	150
SD82114	6	2042	74.8	72	151
SD82144	4	1951	73.1	73	151
ND8286	11	1925	76.4	69	152
CI17439	2	1865	72.9	78	152
XNH1354	20	1853	75.9	67	152
WT179	23	1750	73.9	77	154
CI1442	1	1717	71.5	80	153
ND8460	13	1679	75.1	78	154
SD78207-4	7	1678	77.9	67	152
SD791231	8	1662	77.1	63	153
ND8212	9	1657	54	77	153
MT8039	26	1617	73.3	69	151
WT176	21	1558	70	75	154
IDO180	24	1244	60.4	69	155
IDO301	25	864	62	69	155
MEAN		1973			
LSD(.05)		641			
C.V.		19.9			

PRESHO

S. DAKOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	GENERAL DISEASE 0-3
NE82656	14	1996	66.8	63	150	2
NE83432	16	1920	67.7	57	150	2
SD76463-4	29	1791	68	64	151	2
NE84581	17	1786	63.7	54	151	2
XNH1354	20	1755	67.8	59	151	2
NA-81-362-5	18	1730	70	53	149	2
SD82102	27	1572	64.4	62	151	2
MT8039	26	1563	61.8	64	150	2
ID0301	25	1558	65.8	62	152	2
SD76463-16	5	1539	67.7	66	150	2
NE82438	15	1539	63.1	54	151	2
XH947	19	1537	64.8	60	150	2
WT176	21	1532	66.2	67	154	2
PI476975	3	1450	66.6	58	151	2
ND8407	12	1424	64.4	64	151	2
SD76598-7	28	1377	63.7	62	151	2
SD791231	8	1332	66.8	63	151	2
CI1442	1	1316	67.5	73	154	2
ROSE	30	1295	63.3	65	152	2
SD82144	4	1253	65.7	63	150	2
SD82114	6	1239	64	60	151	3
ND8212	9	1168	61.5	61	154	3
ND8215	10	1115	56.2	68	154	2
SD78207-4	7	1037	62.8	54	151	3
ND8286	11	1006	62.4	58	154	3
WT179	23	976	63.3	58	155	2
ID0180	24	911	61.1	54	156	2
ND8460	13	878	63.8	69	154	3
WT177	22	835	63.3	62	155	2
CI17439	2	661	61.7	63	154	3
MEAN		1370				
LSD(.05)		456				
C.V.		20.4				

HIGHMORE

S. DAKOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	GENERAL DISEASE 0-3
NA-81-362-5	18	2623	73.7	62	150	2
NE82656	14	2588	70.2	69	150	2
NE83432	16	2354	71.5	64	151	2
NE84581	17	2296	69.1	69	151	3
SD76463-4	29	2250	72.4	76	151	3
SD76598-7	28	2247	70.2	74	151	3
SD76463-16	5	2190	72.2	76	152	2
NE82438	15	2189	69.3	69	151	2
XH947	19	2004	69.7	64	151	3
SD82114	6	1959	70.2	74	152	2
SD82102	27	1901	67.3	69	152	3
MT8039	26	1806	65.5	73	152	3
ND8407	12	1759	68.2	83	154	2
PI476975	3	1752	69.8	64	151	3
SD82144	4	1728	69.8	72	151	3
ROSE	30	1714	67.7	64	152	3
ND8286	11	1669	66.9	71	152	3
XNH1354	20	1665	67.3	69	153	3
SD791231	8	1657	70.4	75	153	2
ND8460	13	1533	67.3	81	154	3
ND8215	10	1522	62.9	79	156	2
CI1442	1	1465	70.2	83	156	3
ND8212	9	1396	63.7	77	155	3
SD78207-4	7	1351	68.4	68	152	3
ID0301	25	1210	65.7	72	153	3
CI17439	2	1121	67.3	69	156	3
WT179	23	1105	66.8	69	156	3
ID0180	24	1090	63.8	68	155	3
WT176	21	1074	64	78	154	2
WT177	22	855	66.9	65	156	3
MEAN		1736				
LSD(.05)		442				
C.V.		15.6				

CASSELTON

N. DAKOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	WINTER SURVIVAL %
NE82438	15	1806	78.3	59	156	85
ND8212	9	1740	75.2	71	158	95
WT177	22	1691	74.4	73	159	65
ND8286	11	1689	78.3	71	158	97
XNH1354	20	1675	78.4	62	157	73
CI17439	2	1622	77.8	68	158	97
ND8407	12	1563	77.5	64	158	87
PI476975	3	1507	76.6	49	156	63
SD82144	4	1502	76	68	156	90
ND8215	10	1497	74.7	69	160	68
ND8460	13	1486	78.7	66	159	77
NE83432	16	1409	77.5	59	155	80
NE82656	14	1388	77.8	65	155	80
SD82114	6	1300	78.3	60	156	73
SD78207-4	7	1295	77.5	67	157	85
NORSTAR	29	1231	77.8	86	162	92
NE84581	17	1212	75.7	53	156	60
SEWARD	28	1192	76.8	70	159	60
SD76463-16	5	1122	75.5	66	157	63
SD791231	8	1107	77.8	65	158	80
XH696	27	1106	76.4	61	157	40
WT179	23	1068	73.8	67	161	65
CI1442	1	1056	76.4	73	160	58
NA-81-362-5	18	1025	80.5	51	156	37
NORWIN	30	1022	76.6	60	159	62
WT176	21	921	76	72	161	55
ID0180	24	645	75.7	58	162	33
ID0301	25	554	73.7	55	161	30
MT8039	26	400	71.3	65	160	17
XH947	19	381	75.1	66	157	18
MEAN		1240				
LSD(.05)		642				
C.V.		31.7				

CARRINGTON

N. DAKOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY: NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1:	WINTER SURVIVAL %
NE82438	15	884	71.9	44	156	100
ID0180	24	836	71.9	44	160	98
ND8286	11	823	69.7	50	158	100
WT179	23	800	69	49	159	100
CI1442	1	794	74.4	55	157	93
NE83432	16	728	71.3	43	156	93
ND8215	10	719	67.7	45	158	100
NE82656	14	699	72.4	45	156	98
WT176	21	674	70.3	49	159	98
WT177	22	663	68	45	158	100
XH696	27	641	73.1	43	156	95
MT8039	26	632	73	48	158	93
SD76463-16	5	621	74	47	158	88
ND8212	9	598	68.6	45	158	93
NE84581	17	583	69.9	44	158	98
ND8407	12	569	71.2	46	159	100
ID0301	25	569	71.5	45	160	78
CI17439	2	513	70.2	46	158	100
NORSTAR	29	500	73.9	47	162	97
SEWARD	28	483	72.6	43	159	97
?-5	18	467	76.5	35	156	88
	19	444	72.8	44	157	98
	7	422	71.7	41	158	95
	6	393	73.9	40	157	88
	20	390	75.3	43	159	87
	30	344	73	32	161	93
		340	73.7	35	156	85
		309	74.2	41	160	72
		240	73.1	37	157	93
		211	73.8	38	160	80
		563				
		288				
		?1.4				

WILLISTON

N. DAKOTA

FOUR REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1
NA-81-362-5	18	778	67.9	40	147
NE84581	17	730	67.3	40	148
SD76463-16	5	718	68.6	46	147
NE83432	16	678	70.3	43	148
PI476975	3	666	69.1	42	147
ID0301	25	636	72.8	41	151
XNH1354	20	629	71.3	46	148
SD82114	6	620	68.6	45	148
NE82656	14	620	68.2	44	147
NE82438	15	619	70	37	149
SD791231	8	602	70.4	41	149
ND8286	11	602	69.7	45	151
ND8460	13	558	67.9	47	150
ID0180	24	555	69.1	43	151
XH947	19	543	67.6	45	147
SD78207-4	7	536	71	41	150
ND8215	10	536	63.5	48	151
ND8212	9	535	65	45	151
ND8407	12	530	65	47	150
CI17439	2	523	68.1	49	151
SD82144	4	518	70.7	43	148
CI1442	1	484	69.8	48	151
MT8039	26	483	68.6	43	148
AGASSIZ	28	474	68.8	46	152
WT179	23	440	68.8	42	153
WT176	21	410	72.6	46	152
WT177	22	409	68.4	44	152
NORSTAR	27	341	70	45	154
MEAN		563			
LSD(.05)		57			
C.V.		7.1			

ROSEMOUNT

MINNESOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1:	LODGING 0-9	BYD VIRUS 0-9
MT8039	26	2661	71	88	150	0	2
SD82114	6	2130	73.5	88	150	0	2
NE84581	17	2116	74.2	85	152	0	2
PI476975	3	2087	71	73	149	0	2
CI17439	2	2065	77.4	99	153	0	1
MA-81-362-5	18	1995	72.9	74	149	0	2
NE83432	16	1977	72.9	81	151	1	4
ND8286	11	1964	74.8	94	154	0	1
SD76463-16	5	1948	76.1	97	151	0	2
NE82438	15	1948	68.4	83	153	0	2
SD78207-4	7	1946	72.9	89	152	0	3
ND8212	9	1890	68.4	95	154	0	2
XNH1354	20	1825	72.2	81	153	0	6
SD791231	8	1787	74.2	92	151	0	4
ND8215	10	1784	67.7	99	154	0	2
NE82656	14	1737	68.4	86	150	0	3
CI1442	1	1618	74.2	92	153	0	3
SD82144	4	1616	71	93	149	0	2
ID0301	25	1556	72.2	68	154	0	7
WT177	22	1515	74.8	94	154	0	2
ID0180	24	1509	71.6	83	155	0	3
ND8407	12	1417	71	93	153	4	1
XH947	19	1365	67.7	86	150	0	2
WT179	23	1309	72.2	89	155	0	2
ND8460	13	1302	72.2	97	153	0	2
WT176	21	1197	67.7	90	156	0	2
MEAN		1779					
LSD(.05)		N.S.					
C.V.		30.3					

WASECA

MINNESOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1
NE83432	16	2846	80	58	154
ND8407	12	2740	78	74	155
SD82114	6	2718	79.3	64	154
ND8212	9	2604	77.4	73	155
NA-81-362-5	18	2581	80.6	64	153
ND8215	10	2568	76.1	73	155
NE84581	17	2435	78.7	63	155
WT179	23	2344	77.4	75	155
SD76463-16	5	2258	80	72	153
WT177	22	2252	79.3	71	154
NE82438	15	2231	78.7	63	154
SD78207-4	7	2179	80.6	67	154
ID0180	24	2101	76.1	63	157
CI17439	2	2060	79.3	75	154
ND8286	11	1974	78.7	69	156
MT8039	26	1939	76.1	64	155
WT176	21	1842	75.5	70	156
CI1442	1	1822	79.3	75	153
XNH1354	20	1769	78.7	53	154
SD791231	8	1751	78.7	60	153
NE82656	14	1712	77.4	62	153
ND8460	13	1704	79.3	69	154
SD82144	4	1695	78	65	153
XH947	19	1692	76.1	56	156
PI476975	3	1328	78.7	49	154
ID0301	25	1275	78.7	58	156
MEAN		2093			
LSD(.05)		574			
C.V.		16.7			

SHERIDAN

WYOMING

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1
NA-81-362-5	18	2009	76.3	62	150
NE83432	16	1988	75.6	69	151
SD82144	4	1932	72.5	80	151
NE82656	14	1849	74.2	69	150
PI476975	3	1818	75.4	64	150
XNH1354	20	1757	74.6	69	152
ID0180	24	1751	72.9	73	155
SD78207-4	7	1719	75.8	66	153
ID0301	25	1706	73.4	63	153
MT8039	26	1701	69.5	75	153
ND8407	12	1648	72.8	86	153
SD76463-16	5	1641	74.3	79	151
NE84581	17	1598	73.9	73	152
NE82438	15	1549	73.2	65	153
WT176	21	1473	70.6	73	152
CI17439	2	1464	73.1	77	153
ND8212	9	1448	71.3	78	154
CI1442	1	1426	75.1	77	153
ND8286	11	1336	71.8	72	153
ND8215	10	1302	70.6	75	155
SD82114	6	1251	73.7	69	151
ND8460	13	1219	74.7	79	154
WT179	23	1186	72.5	68	155
WT177	22	1103	73.4	70	155
XH947	19	1045	71.2	67	150
SD791231	8	1036	73	78	153
MEAN		1537			
LSD(.05)		566			
C.V.		22.5			

ARCHER

WYOMING

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1
XNH1354	20	1950	75.1	52	161
XH947	19	1930	73.2	54	159
PI476975	3	1861	74.6	53	159
NE84581	17	1809	75.7	53	160
SD82144	4	1775	74.9	55	160
MT8039	26	1771	73.1	54	161
SD76463-16	5	1766	76.4	56	160
CI1442	1	1704	76.4	60	163
ND8286	11	1681	74.4	57	164
SD82114	6	1605	75.4	53	161
NE82656	14	1596	74.6	64	160
NE82438	15	1578	74.9	51	163
CI17439	2	1574	74.9	61	163
NE83432	16	1565	76.2	52	161
SD791231	8	1527	74.6	58	163
NA-81-362-5	18	1527	76.8	49	160
ND8407	12	1511	72.6	58	164
ID0180	24	1491	73.4	57	164
ND8212	9	1441	72.4	52	166
ID0301	25	1428	75.5	51	164
ND8460	13	1296	75.4	58	164
SD78207-4	7	1199	75.9	56	163
WT179	23	1199	73.1	56	166
WT177	22	1175	74	56	165
WT176	21	1128	72.5	55	163
ND8215	10	1098	71.5	58	166
MEAN		1546			
LSD(.05)		422			
C.V.		16.6			

MOCCASIN

MONTANA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	LODGING 0-5
XNH1354	20	2831	76.9	74	158	0
NE82656	14	2809	74.7	76	157	1
MT8039	26	2791	71.5	82	156	0
NE84581	17	2726	76.5	79	158	1
ID0180	24	2712	76.2	76	161	1
ID0301	25	2690	76.5	70	160	0
NE82438	15	2549	76.6	83	158	0
NA-81-362-5	18	2396	76.9	75	156	1
SD76463-16	5	2392	78	79	157	3
PI476975	3	2336	74.3	63	155	1
SD82114	6	2311	74	78	156	3
ND8212	9	2293	76.2	74	161	2
ND8286	11	2291	78	78	161	1
NE83432	16	2271	77.4	70	158	1
XH947	19	2271	73.9	75	156	1
SD82144	4	2174	76	74	157	1
CI17439	2	2085	79.5	82	159	2
WT179	23	2078	78.2	86	161	1
WT177	22	2069	79.3	82	161	1
ND8215	10	2067	76.4	81	160	1
SD78207-4	7	2047	79.6	75	160	2
ND8407	12	2047	74.4	81	160	2
CI1442	1	1991	79.6	86	161	3
SD791231	8	1903	78	83	157	2
WT176	21	1849	76	85	161	4
ND8460	13	1562	79.9	84	161	1
MEAN		2290				
LSD(.05)		427				
C.V.		11.4				

SIDNEY

MONTANA

FOUR REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1
NA-81-362-5	18	767	77.1	33	145
NE82656	14	763	75.2	37	146
IDO301	25	748	77	37	150
NE82438	15	736	74.7	33	148
SD76463-16	5	725	75.9	41	146
PI476975	3	723	74.6	39	145
IDO180	24	711	74.4	34	152
ND8286	11	706	72.8	38	150
SD82144	4	704	75.2	40	146
XNH1354	20	704	77	36	148
CI17439	2	681	71.8	39	150
ND8215	10	681	68.4	40	151
ND8460	13	679	74.7	42	149
NE83432	16	673	76.8	35	147
ND8407	12	671	71.2	39	149
NE84581	17	671	75.9	29	147
WT177	22	666	71.5	39	152
WT179	23	666	71.5	37	152
CI1442	1	662	74.4	38	150
MT8039	26	627	73.6	37	148
ND8212	9	622	69	37	150
SD78207-4	7	607	75	34	148
WT176	21	583	67.1	40	153
SD82114	6	577	74.3	36	146
SD791231	8	575	76.1	36	147
XH947	19	562	73.9	33	147
MEAN		673			
LSD(.05)		N.S.			
C.V.		16.5			

BOZEMAN, MONTANA - FOUR REPLICATIONS

C.I. OR SEL. NO.	ENTRY: NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1:	LODGING 0-5	STEM RUST: SEV. %	STEM RUST: RESP: 0-9:	SEEDLING COLOR* 1-5	SEEDLING HABIT** 1-5	SEEDLING WIDTH*** 1-5
NE83432	16	4408	72.8	95	164	1	60	5	3	3	3
PI476975	3	4170	76.8	91	159	0	1	1	2.5	3	3
NE82438	15	4049	77	92	166	0	5	1	3.5	3	3.5
ID0180	24	3866	78.6	105	169	0	90	8	3	3	3
XNH1354	20	3778	74.6	96	166	0	90	8	3	3	3
NA-81-362-5	18	3743	77.7	94	162	0	50	5	3.5	3	3
ID0301	25	3669	72.2	91	167	1	90	8	2.5	3	3
ND8286	11	3648	80.1	112	166	0	10	3	3.5	3.5	3.5
SD76463-16	5	3614	76.9	103	166	1	50	8	3.5	3.5	3
MT8039	26	3447	72	104	162	0	10	2	3	3	3
SD82114	6	3426	79.9	98	161	0	10	3	2.7	3	3
ND8407	12	3393	79.5	110	164	1	5	1	3	3	3
NE84581	17	3380	80.2	98	161	1	5	1	3	3.5	3.5
ND8460	13	3337	80.4	109	165	0	10	2	3	3	3
NE82656	14	3321	74	100	165	0	5	2	2.5	3	3
WT179	23	3288	78.7	102	168	1	10	3	4	3.5	4
ND8215	10	3183	79.3	114	165	0	5	1	3	3.5	3
WT176	21	3151	76	101	169	0	90	8	3	3	3
ND8212	9	3135	79.3	101	166	0	1	1	3.5	3	3
SD82144	4	3131	75.9	98	160	0	1	1	3	3	3
SD78207-4	7	2864	78.4	108	164	0	20	3	3.5	3.5	3
SD791231	8	2863	78.9	103	164	0	10	3	3	3.5	3
WT177	22	2774	78.4	107	165	3	10	3	3.5	3	3.5
XH947	19	2685	71	95	160	1	50	5	3	3	3
CI17439	2	2238	80	99	167	1	10	2	4	4	4
CI1442	1	1750	77.4	94	164	4	30	8	3	3	3
MEAN		3320									
LSD(.05)		625									
C.V.		13.4									

* 1=yellow, 5=blue; ** 1=erect, 5=prostrate; *** 1=wide, 5=narrow.

ABERDEEN

IDAHO

TWO REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	DAYS TO RIPENING FROM 1/1	LODGING 0-9	STRAW STRENGTH 0-5	FROST DAMAGE 0-5
BLIZZARD	29	5546	96	160	191	1	3	3
NE82438	15	5536	84	156	191	1	2	2
XNH1354	20	5050	83	157	189	0	2	3
NE83432	16	4142	76	156	188	0	3	3
ND8286	11	4128	96	161	187	1	3	2
WT176	21	4073	92	161	189	0	4	3
SD78207-4	7	3955	96	159	191	1	3	3
PI476975	3	3914	71	154	184	0	2	2
ND8215	10	3875	93	157	187	0	2	3
NEELEY	27	3864	82	163	189	0	3	3
WESTON	28	3849	96	155	190	1	3	4
NE84581	17	3837	72	153	184	0	2	3
ID0301	25	3775	74	158	188	0	3	3
SURVIVOR	30	3745	87	159	188	0	3	3
NE82656	14	3724	84	155	185	0	3	3
MT8039	26	3680	93	156	186	0	3	3
XH947	19	3650	74	152	185	0	2	3
ND8407	12	3614	110	159	188	1	3	3
SD82144	4	3558	96	154	182	1	3	3
SD791231	8	3557	89	158	187	1	3	3
SD82114	6	3541	82	156	185	0	3	3
ID0180	24	3507	73	162	188	0	3	3
NA-81-362-5	18	3437	64	152	183	0	1	3
ND8212	9	3325	87	159	186	0	2	2
SD76463-16	5	3286	86	155	185	0	3	3
ND8460	13	3208	105	158	188	1	3	3
WT177	22	2982	93	162	190	0	4	2
WT179	23	2758	81	163	189	0	3	3
CI1442	1	2743	98	161	187	1	4	3
CI17439	2	2701	87	161	185	0	3	3
MEAN		3752						
LSD(.05)		1302						
C.V.		17.0						

LIND

WASHINGTON

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1
NE84581	17	2165	79.7	61	143
ND8215	10	2056	77.3	66	145
ND8286	11	2040	77.4	66	145
ID0301	25	1928	78.8	58	146
XNH1354	20	1910	78.7	63	145
WT176	21	1870	76	73	146
MT8039	26	1834	75.9	62	142
XH947	19	1831	76.6	58	142
ND8407	12	1796	78.6	68	143
PI476975	3	1789	77.9	52	142
ND8212	9	1784	76.8	64	145
NE82438	15	1731	77.1	59	144
CI17439	2	1726	78.3	65	145
NE82656	14	1722	76.9	60	143
ID0180	24	1706	78.6	64	146
SD76463-16	5	1679	79.5	64	142
SD82144	4	1654	77.5	60	142
CI1442	1	1650	78.8	69	146
SD82114	6	1598	79.9	59	142
WT179	23	1594	77.4	69	149
NA-81-362-5	18	1536	79.6	53	143
WT177	22	1533	78	66	146
SD791231	8	1515	77.8	65	143
ND8460	13	1329	77.7	66	144
NE83432	16	1301	79.1	61	144
SD78207-4	7	800	79.3	58	144
MEAN		1695			
LSD(.05)		289			
C.V.		10.4			

Table 14. Summary of mean yields (kg/ha) of 26 wheats grown in the 1988 Northern Regional Performance Nursery at 20 locations with state means and ranks.

VARIETY OR PEDIGREE	C.I. OR SEL. NO.	ENTRY NO.	LINCOLN NEBRASKA		NORTH PLATTE NEBRASKA		ALLIANCE NEBRASKA		NEBRASKA STATE MEAN	
HiPlains/Wings/3/Pkr*4/Agnt//Bel.198/Lcr	NE82438	15	3241	11	2255	10	4002	4	3166	6
Complex Pedigree	NE83432	16	3728	3	2085	17	4163	2	3325	4
OK11252A/W76-1226 (Abilene)	NA-81-362-5	18	4282	1	2486	5	4364	1	3711	1
Winter Wheat Hybrid	XNH1354	20	3232	12	2095	16	4031	3	3120	8
Bez 1/Ctk78//Arthur/Ctk78/3/Bennett	NE84581	17	3596	4	2873	1	3773	9	3414	3
Brule/3/Parker*4/Agent//Belot.198/Lcr	NE82656	14	3374	5	2798	2	3682	11	3285	5
Colt	PI476975	3	3356	6	1973	20	3335	19	2888	14
Lancota/Froid//NE69559/Wnk	MT8039	26	3141	13	2369	8	3977	6	3162	7
CI15322//3*(Agent/4*Scout66)	SD76463-16	5	3297	9	2496	4	3057	21	2950	11
SD74221*2/Lathrop	SD82114	6	3347	7	2428	7	3082	20	2952	10
Winter Wheat Hybrid	XH947	19	3867	2	2675	3	3982	5	3508	2
Rrr*2/1809	ND8286	11	2867	18	2184	13	3353	16	2801	18
Ctk/3/Froid*2//ND363/ND269	ND8407	12	3089	14	2118	15	3341	17	2849	15
Rrr/3/Froid//Winoka/WW8	ND8215	10	3266	10	1827	22	3588	13	2894	13
CI15322//Aga/4*Sut 66/3/Ctk 78/4/SD74221	SD82144	4	3302	8	2158	14	3339	18	2933	12
Rrr//Yogo/Trapper	ND8212	9	2235	25	2059	19	3600	12	2631	21
Complex Pedigree	ID0301	25	2262	24	1705	25	3948	7	2638	20
Turkey/Burt//Bezostaya 1	ID0180	24	2345	22	1671	26	3412	15	2476	24
SD76669*2/KS71591	SD791231	8	2955	15	2232	11	3707	10	2965	9
SD76109/Rose	SD78207-4	7	2930	16	2443	6	3055	22	2809	17
Kharkov 22 MC/Bezostaya 1	WT176	21	2291	23	1788	23	3472	14	2517	23
Roughrider	CI17439	2	2486	20	2208	12	3827	8	2840	16
Rrr/F0.1527	ND8460	13	2878	17	2307	9	2999	24	2728	19
Norstar/Rrr	WT179	23	2441	21	1723	24	2863	26	2342	26
Kharkof	CI1442	1	2573	19	2066	18	2961	25	2533	22
Norstar/Rrr	WT177	22	2215	26	1961	21	3026	23	2400	25
	MEAN		3023		2192		3536		2917	
	LSD(.05)		489		403		650		545	
	C.V.		9.9		11.2		11.2		10.9	

Table 14. Continued.

C.I. OR SEL. NO.	ENTRY NO.	BROOKINGS S. DAKOTA		HIGHMORE S. DAKOTA		PRESHO S. DAKOTA		SOUTH DAKOTA STATE MEAN		ARCHER WYOMING		SHERIDAN WYOMING		WYOMING STATE MEAN	
NE82438	15	2526	2	2189	6	1539	8	2085	5	1578	12	1549	14	1564	14
NE83432	16	2307	3	2354	3	1920	2	2194	3	1565	14	1988	2	1777	4
NA-81-362-5	18	2836	1	2623	1	1730	5	2396	1	1527	15	2009	1	1768	5
XNH1354	20	1853	16	1665	14	1755	4	1758	10	1950	1	1757	6	1854	2
NE84581	17	2275	6	2296	4	1786	3	2119	4	1809	4	1598	13	1704	8
NE82656	14	2180	7	2588	2	1996	1	2255	2	1596	11	1849	4	1723	7
PI476975	3	2106	10	1752	11	1450	12	1769	9	1861	3	1818	5	1839	3
MT8039	26	1617	23	1806	9	1563	6	1662	12	1771	6	1701	10	1736	6
SD76463-16	5	2282	5	2190	5	1539	8	2004	6	1766	7	1641	12	1704	8
SD82114	6	2042	12	1959	8	1239	17	1747	11	1605	10	1251	21	1428	20
XH947	19	2044	11	2004	7	1537	10	1862	7	1930	2	1045	25	1487	17
ND8286	11	1925	14	1669	13	1006	21	1534	16	1681	9	1336	19	1509	16
ND8407	12	2293	4	1759	10	1424	13	1825	8	1511	17	1648	11	1579	11
ND8215	10	2119	9	1522	17	1115	19	1585	14	1098	26	1302	20	1200	24
SD82144	4	1951	13	1728	12	1253	16	1644	13	1775	5	1932	3	1854	1
ND8212	9	1657	22	1396	19	1168	18	1407	18	1441	19	1448	17	1445	19
ID0301	25	864	26	1210	21	1558	7	1210	25	1428	20	1706	9	1567	12
ID0180	24	1244	25	1090	24	911	23	1082	26	1491	18	1751	7	1621	10
SD791231	8	1662	21	1657	15	1332	14	1551	15	1527	15	1036	26	1281	22
SD78207-4	7	1678	20	1351	20	1037	20	1355	21	1199	22	1719	8	1459	18
WT176	21	1558	24	1074	25	1532	11	1388	19	1128	25	1473	15	1300	21
CI17439	2	1865	15	1121	22	661	26	1216	24	1574	13	1464	16	1519	15
ND8460	13	1679	19	1533	16	878	24	1363	20	1296	21	1219	22	1258	23
WT179	23	1750	17	1105	23	976	22	1277	22	1199	22	1186	23	1193	25
CI1442	1	1717	18	1465	18	1316	15	1499	17	1704	8	1426	18	1565	13
WT177	22	2137	8	855	26	835	25	1275	23	1175	24	1103	24	1139	26
MEAN		1930		1691		1348		1656		1546		1537		1541	
LSD(.05)		651		428		479		430		422		566		N.S.	
C.V.		20.6		15.4		21.7		19.4		16.6		22.5		19.7	

Table 14. Continued.

C.I. OR SEL. NO.	ENTRY NO.	WILLISTON N. DAKOTA		CASSELTON N. DAKOTA		CARRINGTON N. DAKOTA		NORTH DAKOTA STATE MEAN		ROSEMOUNT* MINNESOTA		WASECA MINNESOTA		LIND WASHINGTON	
NE82438	15	619	10	1806	1	884	1	1103	1	1948	9	2231	11	1731	12
NE83432	16	678	4	1409	12	728	6	938	4	1977	7	2846	1	1301	25
NA-81-362-5	18	778	1	1025	21	467	18	757	18	1995	6	2581	5	1536	21
XNH1354	20	629	7	1675	5	390	22	898	8	1825	13	1769	19	1910	5
NE84581	17	730	2	1212	16	583	14	842	11	2116	3	2435	7	2165	1
NE82656	14	620	8	1388	13	699	8	902	7	1737	16	1712	21	1722	14
PI476975	3	666	5	1507	8	340	23	838	12	2087	4	1328	25	1789	10
MT8039	26	483	23	400	25	632	11	505	25	2661	1	1939	16	1834	7
SD76463-16	5	718	3	1122	17	621	12	820	13	1948	10	2258	9	1679	16
SD82114	6	620	9	1300	14	393	21	771	16	2130	2	2718	3	1598	19
XH947	19	543	15	381	26	444	19	456	26	1365	23	1692	24	1831	8
ND8286	11	602	11	1689	4	823	3	1038	2	1964	8	1974	15	2040	3
ND8407	12	530	19	1563	7	569	16	887	9	1417	22	2740	2	1796	9
ND8215	10	536	16	1497	10	719	7	918	6	1784	15	2568	6	2056	2
SD82144	4	518	21	1502	9	240	25	753	19	1616	18	1695	23	1654	17
ND8212	9	535	18	1740	2	598	13	958	3	1890	12	2604	4	1784	11
ID0301	25	636	6	554	24	569	15	586	24	1556	19	1275	26	1928	4
ID0180	24	555	14	645	23	836	2	679	21	1509	21	2101	13	1706	15
SD791231	8	602	11	1107	18	211	26	640	23	1787	14	1751	20	1515	23
SD78207-4	7	536	17	1295	15	422	20	751	20	1946	11	2179	12	800	26
WT176	21	410	25	921	22	674	9	668	22	1197	26	1842	17	1870	6
CI17439	2	523	20	1622	6	513	17	886	10	2065	5	2060	14	1726	13
ND8460	13	558	13	1486	11	309	24	784	14	1302	25	1704	22	1329	24
WT179	23	440	24	1068	19	800	4	769	17	1309	24	2344	8	1594	20
CI1442	1	484	22	1056	20	794	5	778	15	1618	17	1822	18	1650	18
WT177	22	409	26	1691	3	663	10	921	5	1515	20	2252	10	1533	22
MEAN		575		1256		574		802		1779		2093		1695	
LSD(.05)		57		682		297		N.S.		N.S.		574		289	
C.V.		7.1		33.1		31.6		31.3		30.3		16.7		10.4	

* Not included in state or regional means.

Table 14. Concluded.

C.I. OR SEL. NO.	ENTRY NO.	SIDNEY* MONTANA		MOCCASIN MONTANA		BOZEMAN MONTANA		MONTANA STATE MEAN		CLOVIS (IRR.) NEW MEXICO		CLOVIS (DRYL.)* NEW MEXICO		ABERDEEN IDAHO		REGIONAL AVERAGE	
NE82438	15	736	4	2549	7	4049	3	3299	3	3784	10	1300	23	5536	1	2475	1
NE83432	16	673	14	2271	15	4408	1	3340	1	4125	6	1621	15	4142	3	2472	2
NA-81-362-5	18	767	1	2396	8	3743	6	3070	8	4114	7	1735	11	3437	19	2467	3
XNH1354	20	704	9	2831	1	3778	5	3304	2	4641	2	2088	4	5050	2	2412	4
NE84581	17	671	15	2726	4	3380	13	3053	10	3393	14	2276	1	3837	9	2380	5
NE82656	14	763	2	2809	2	3321	15	3065	9	3990	8	1874	8	3724	11	2356	6
PI476975	3	723	6	2336	10	4170	2	3253	5	4439	5	1745	10	3914	7	2243	7
MT8039	26	627	20	2791	3	3447	10	3119	7	4643	1	1446	19	3680	12	2223	8
SD76463-16	5	725	5	2392	9	3614	9	3003	11	3480	12	1893	7	3286	21	2202	9
SD82114	6	577	24	2311	11	3426	11	2869	13	4510	4	2121	3	3541	17	2198	10
XH947	19	562	26	2271	14	2685	24	2478	20	4528	3	2060	5	3650	13	2183	11
ND8286	11	706	8	2291	13	3648	8	2970	12	3447	13	1709	12	4128	4	2157	12
ND8407	12	671	15	2047	21	3393	12	2720	14	3207	16	1465	18	3614	14	2155	13
ND8215	10	681	11	2067	20	3183	17	2625	18	3363	15	2023	6	3875	8	2100	14
SD82144	4	704	9	2174	16	3131	20	2653	17	3761	11	1548	17	3558	15	2098	15
ND8212	9	622	21	2293	12	3135	19	2714	15	3127	17	1688	13	3325	20	2009	16
ID0301	25	748	3	2690	6	3669	7	3180	6	3927	9	2216	2	3775	10	1982	17
ID0180	24	711	7	2712	5	3866	4	3289	4	2653	20	1419	21	3507	18	1912	18
SD791231	8	575	25	1903	24	2863	22	2383	24	2685	19	1376	22	3557	16	1900	19
SD78207-4	7	607	22	2047	21	2864	21	2455	21	2488	21	1635	14	3955	6	1882	20
WT176	21	583	23	1849	25	3151	18	2500	19	2449	22	1426	20	4073	5	1856	21
CI17439	2	681	11	2085	17	2238	25	2161	25	2800	18	1554	16	2701	26	1851	22
ND8460	13	679	13	1562	26	3337	14	2450	22	1845	26	1298	24	3208	22	1772	23
WT179	23	666	17	2078	18	3288	16	2683	16	2386	23	1237	25	2758	24	1765	24
CI1442	1	662	19	1991	23	1750	26	1870	26	2317	24	1850	9	2743	25	1755	25
WT177	22	666	18	2069	19	2774	23	2422	23	2110	25	963	26	2982	23	1752	26
MEAN		673		2290		3320		2805		3393		1676		3675		2098	
LSD(.05)		N.S.		427		625		743		930		N.S.		1296		254	
C.V.		16.5		11.4		13.4		13.2		16.7		27.5		17.1		16.6	

* Not included in state or regional averages.

Table 15. Summary of mean yields (kg/ha) and ranks of 26 wheats grown in the 1988 Northern Regional Performance Nursery at 11 central and northern locations from which a CV of less than 17.5 and a significant F test for entries were obtained.

C.I. OR SEL. NO.	ENTRY NO.	LINCOLN NEBRASKA		NORTH PLATTE NEBRASKA		ALLIANCE NEBRASKA		ARCHER WYOMING		WASECA MINNESOTA		HIGHMORE S. DAKOTA	
NE82438	15	3241	11	2255	10	4002	4	1578	12	2231	11	2189	6
NA-81-362-5	18	4282	1	2486	5	4364	1	1527	15	2581	5	2623	1
NE84581	17	3596	4	2873	1	3773	9	1809	4	2435	7	2296	4
NE83432	16	3728	3	2085	17	4163	2	1565	14	2846	1	2354	3
XNH1354	20	3232	12	2095	16	4031	3	1950	1	1769	19	1665	14
NE82656	14	3374	5	2798	2	3682	11	1596	11	1712	21	2588	2
MT8039	26	3141	13	2369	8	3977	6	1771	6	1939	16	1806	9
XH947	19	3867	2	2675	3	3982	5	1930	2	1692	24	2004	7
SD76463-16	5	3297	9	2496	4	3057	21	1766	7	2258	9	2190	5
SD82114	6	3347	7	2428	7	3082	20	1605	10	2718	3	1959	8
PI476975	3	3356	6	1973	20	3335	19	1861	3	1328	25	1752	11
ND8286	11	2867	18	2184	13	3353	16	1681	9	1974	15	1669	13
ND8407	12	3089	14	2118	15	3341	17	1511	17	2740	2	1759	10
ND8215	10	3266	10	1827	22	3588	13	1098	26	2568	6	1522	17
SD82144	4	3302	8	2158	14	3339	18	1775	5	1695	23	1728	12
ID0301	25	2262	24	1705	25	3948	7	1428	20	1275	26	1210	21
ID0180	24	2345	22	1671	26	3412	15	1491	18	2101	13	1090	24
ND8212	9	2235	25	2059	19	3600	12	1441	19	2604	4	1396	19
SD791231	8	2955	15	2232	11	3707	10	1527	15	1751	20	1657	15
SD78207-4	7	2930	16	2443	6	3055	22	1199	22	2179	12	1351	20
WT176	21	2291	23	1788	23	3472	14	1128	25	1842	17	1074	25
ND8460	13	2878	17	2307	9	2999	24	1296	21	1704	22	1533	16
CI17439	2	2486	20	2208	12	3827	8	1574	13	2060	14	1121	22
WT179	23	2441	21	1723	24	2863	26	1199	22	2344	8	1105	23
WT177	22	2215	26	1961	21	3026	23	1175	24	2252	10	855	26
CI1442	1	2573	19	2066	18	2961	25	1704	8	1822	18	1465	18
MEAN		3023		2192		3536		1546		2093		1691	
LSD(.05)		489		403		650		422		574		428	
C.V.		9.9		11.2		11.2		16.6		16.7		15.4	

Table 15. Concluded.

C.I. OR SEL. NO.	ENTRY NO.	MOCCASIN MONTANA		BOZEMAN MONTANA		ABERDEEN IDAHO		LIND WASHINGTON		WILLISTON N. DAKOTA		REGIONAL AVERAGE	
NE82438	15	2549	7	4049	3	5536	1	1731	12	619	10	2725	1
NA-81-362-5	18	2396	8	3743	6	3437	19	1536	21	778	1	2705	2
NE84581	17	2726	4	3380	13	3837	9	2165	1	730	2	2693	3
NE83432	16	2271	15	4408	1	4142	3	1301	25	678	4	2685	4
XNH1354	20	2831	1	3778	5	5050	2	1910	5	629	7	2631	5
NE82656	14	2809	2	3321	15	3724	11	1722	14	620	8	2541	6
MT8039	26	2791	3	3447	10	3680	12	1834	7	483	23	2476	7
XH947	19	2271	14	2685	24	3650	13	1831	8	543	15	2466	8
SD76463-16	5	2392	9	3614	9	3286	21	1679	16	718	3	2432	9
SD82114	6	2311	11	3426	11	3541	17	1598	19	620	9	2421	10
PI476975	3	2336	10	4170	2	3914	7	1789	10	666	5	2407	11
ND8286	11	2291	13	3648	8	4128	4	2040	3	602	11	2403	12
ND8407	12	2047	21	3393	12	3614	14	1796	9	530	19	2358	13
ND8215	10	2067	20	3183	17	3875	8	2056	2	536	16	2326	14
SD82144	4	2174	16	3131	20	3558	15	1654	17	518	21	2276	15
ID0301	25	2690	6	3669	7	3775	10	1928	4	636	6	2229	16
ID0180	24	2712	5	3866	4	3507	18	1706	15	555	14	2223	17
ND8212	9	2293	12	3135	19	3325	20	1784	11	535	18	2219	18
SD791231	8	1903	24	2863	22	3557	16	1515	23	602	11	2206	19
SD78207-4	7	2047	21	2864	21	3955	6	800	26	536	17	2124	20
WT176	21	1849	25	3151	18	4073	5	1870	6	410	25	2086	21
ND8460	13	1562	26	3337	14	3208	22	1329	24	558	13	2065	22
CI17439	2	2085	17	2238	25	2701	26	1726	13	523	20	2050	23
WT179	23	2078	18	3288	16	2758	24	1594	20	440	24	1985	24
WT177	22	2069	19	2774	23	2982	23	1533	22	409	26	1932	25
CI1442	1	1991	23	1750	26	2743	25	1650	18	484	22	1928	26
MEAN		2290		3320		3675		1695		575		2330	
LSD(.05)		427		625		1296		289		57		299	
C.V.		11.4		13.4		17.1		10.4		7.1		14.0	

Table 16. Summary of mean yields (kg/ha) and ranks for 20 wheats grown in the Northern Regional Performance Nursery at 19 locations in 1987 and 1988 with state means and ranks.

VARIETY OR PEDIGREE	C.I. OR SEL. NO.	ENTRY NO.	LINCOLN NEBRASKA		NORTH PLATTE NEBRASKA		ALLIANCE NEBRASKA		NEBRASKA STATE MEAN	
OK11252A/W76-1226 (Abilene)	NA-81-362-5	18	3704	1	2944	5	4789	1	3812	1
Brule/3/Parker*4/Agent//Belot.198/Lcr	NE82656	14	2549	11	3591	1	4285	3	3475	2
Lancota/Froid//NE69559/Wnk	MT8039	26	2465	12	3054	2	4456	2	3325	3
HiPlains/Wings/3/Pkr*4/Agnt//Bel.198/Lcr	NE82438	15	2584	9	2997	4	4159	4	3246	4
Colt	PI476975	3	2708	6	3008	3	3931	5	3216	5
Rrr*2/1809	ND8286	11	2563	10	2858	10	3855	6	3092	7
CI15322//3*(Agent/4*Scout66)	SD76463-16	5	2771	5	2904	7	3347	15	3007	10
CI15322//Aga/4*Sut 66/3/Ctk 78/4/SD74221	SD82144	4	2689	7	2892	8	3467	13	3016	9
SD74221*2/Lathrop	SD82114	6	2858	2	2937	6	3630	10	3142	6
Turkey/Burt//Bezostaya 1	ID0180	24	1945	20	2584	12	3822	7	2784	14
Rrr/3/Froid//Winoka/WW8	ND8215	10	2819	4	2264	19	3499	11	2860	13
Rrr//Yogo/Trapper	ND8212	9	2279	14	2451	16	3449	14	2726	17
Kharkov 22 MC/Bezostaya 1	WT176	21	2161	16	2521	13	3497	12	2727	16
SD76109/Rose	SD78207-4	7	2461	13	2863	9	3335	17	2886	11
Ctk/3/Froid*2//ND363/ND269	ND8407	12	2831	3	2455	15	3340	16	2875	12
SD76669*2/KS71591	SD791231	8	2637	8	2774	11	3754	8	3055	8
Roughrider	CI17439	2	2139	17	2509	14	3667	9	2771	15
Norstar/Rrr	WT179	23	2019	19	2363	18	3144	18	2509	19
Norstar/Rrr	WT177	22	2054	18	2256	20	2847	20	2386	20
Kharkof	CI1442	1	2251	15	2376	17	2917	19	2515	18
	MEAN		2524		2730		3660		2971	
	LSD(.05)		626		637		793		438	
	C.V.		11.1		11.7		11.8		11.8	

Table 16. Continued.

C.I. OR SEL. NO.	ENTRY NO.	PRESHO S. DAKOTA		HIGHMORE S. DAKOTA		SOUTH DAKOTA STATE MEAN		WILLISTON N. DAKOTA		CASSELTON N. DAKOTA		CARRINGTON N. DAKOTA		NORTH DAKOTA STATE MEAN	
NA-81-362-5	18	2446	3	3382	1	2914	2	1358	1	3259	2	1401	17	2006	4
NE82656	14	2688	1	3184	2	2936	1	1351	3	2916	6	1815	2	2027	3
MT8039	26	2540	2	2693	5	2617	4	1200	6	2405	20	1456	13	1687	19
NE82438	15	2233	7	2780	4	2507	5	1142	12	3583	1	1492	12	2073	1
PI476975	3	2255	6	2424	11	2339	8	1146	11	2942	5	1152	20	1747	14
ND8286	11	2163	11	2584	7	2373	7	1193	7	3116	3	1835	1	2048	2
SD76463-16	5	2349	5	2928	3	2639	3	1352	2	2698	11	1541	11	1864	7
SD82144	4	2127	12	2480	9	2303	9	1140	13	3021	4	1401	18	1854	8
SD82114	6	2191	10	2666	6	2428	6	1231	4	2640	13	1439	15	1770	12
ID0180	24	1918	18	1995	19	1956	18	1151	8	2639	14	1659	6	1816	10
ND8215	10	2070	15	2434	10	2252	12	1147	10	2901	8	1774	3	1940	5
ND8212	9	2216	8	2364	12	2290	10	1111	14	2902	7	1766	4	1926	6
WT176	21	2410	4	2080	17	2245	13	1088	17	2487	19	1596	8	1724	18
SD78207-4	7	2087	13	2252	13	2169	15	1102	16	2671	12	1439	16	1738	15
ND8407	12	2072	14	2492	8	2282	11	1210	5	2488	18	1575	9	1758	13
SD791231	8	2210	9	2213	14	2211	14	1084	18	2568	16	1283	19	1645	20
CI17439	2	1742	20	2058	18	1900	19	1150	9	2715	10	1630	7	1832	9
WT179	23	1947	17	2087	16	2017	17	1059	19	2604	15	1545	10	1736	16
WT177	22	1788	19	1954	20	1871	20	1028	20	2723	9	1449	14	1733	17
CI1442	1	1975	16	2205	15	2090	16	1103	15	2500	17	1742	5	1782	11
MEAN		2171		2463		2317		1167		2789		1550		1835	
LSD(.05)		446		454		520		N.S.		N.S.		N.S.		N.S.	
C.V.		12.2		10.1		11.1		7.2		15.9		27.6		18.9	

Table 16. Continued.

C.I. OR SEL. NO.	ENTRY NO.	ARCHER WYOMING		SHERIDAN WYOMING		WYOMING STATE MEAN		MOCCASIN MONTANA		SIDNEY* MONTANA		BOZEMAN MONTANA		MONTANA STATE MEAN	
NA-81-362-5	18	2140	4	2633	2	2387	2	2922	15	1918	3	3746	13	3334	12
NE82656	14	2183	1	2247	10	2215	8	2951	14	1822	12	4026	7	3489	11
MT8039	26	2106	6	2195	12	2151	9	3639	2	1995	2	4495	2	4067	2
NE82438	15	1741	18	2094	13	1918	15	3623	3	1895	4	4166	5	3895	3
PI476975	3	2181	2	2381	7	2281	4	2890	16	1879	6	4326	3	3608	7
ND8286	11	1912	14	1868	17	1890	16	3607	4	1810	13	4112	6	3860	4
SD76463-16	5	2096	7	2450	5	2273	5	3152	10	1867	8	4214	4	3683	5
SD82144	4	2140	5	2747	1	2443	1	3082	12	1807	14	3521	15	3301	13
SD82114	6	1745	16	1771	19	1758	20	2758	17	1617	19	3760	11	3259	14
ID0180	24	2155	3	2550	3	2352	3	4125	1	1871	7	4512	1	4319	1
ND8215	10	1785	15	2271	9	2028	11	3318	6	1859	9	3949	8	3634	6
ND8212	9	1982	12	2526	4	2254	6	3351	5	1839	11	3749	12	3550	10
WT176	21	1623	20	2380	8	2002	13	3269	7	2021	1	3851	10	3560	8
SD78207-4	7	2067	8	1967	16	2017	12	3035	13	1762	15	3410	16	3222	15
ND8407	12	2028	9	2438	6	2233	7	2647	19	1891	5	3596	14	3121	18
SD791231	8	1945	13	1577	20	1761	19	2530	20	1478	20	3367	17	2948	19
CI17439	2	2007	11	1849	18	1928	14	3127	11	1851	10	3275	18	3201	16
WT179	23	1662	19	2061	14	1862	18	3190	9	1760	16	3927	9	3558	9
WT177	22	1742	17	2032	15	1887	17	3215	8	1664	18	3145	19	3180	17
CI1442	1	2016	10	2214	11	2115	10	2706	18	1698	17	2523	20	2614	20
MEAN		1963		2210		2087		3157		1815		3784		3470	
LSD(.05)		N.S.		N.S.		N.S.		N.S.		N.S.		838		783	
C.V.		17.1		25.1		21.9		9.3		12.3		11.5		10.9	

* Not included in state or regional averages.

Table 16. Concluded.

C.I. OR SEL. NO.	ENTRY NO.	CLOVIS (IRR.) NEW MEXICO		CLOVIS (DRYL.)* NEW MEXICO		WASECA MINNESOTA		ROSEMOUNT* MINNESOTA		ABERDEEN IDAHO		LIND* WASHINGTON		REGIONAL AVERAGE	
NA-81-362-5	18	5195	3	3063	3	2613	3	1991	9	5048	8	1188	19	3172	1
NE82656	14	5273	2	2817	7	2077	16	2058	5	5091	6	1326	17	3082	2
MT8039	26	4994	5	2832	6	2354	11	2476	1	5670	2	1486	11	3048	3
NE82438	15	3613	16	2123	19	2602	4	2081	4	6210	1	1246	18	3001	4
PI476975	3	4712	6	2721	10	1988	17	2131	2	5308	4	1372	16	2890	5
ND8286	11	3964	13	2511	15	2367	10	2123	3	5120	5	1700	4	2875	6
SD76463-16	5	4488	8	3135	2	2513	7	2048	6	3949	15	1663	5	2850	7
SD82144	4	5135	4	2986	5	1879	19	1854	13	4935	11	1546	9	2844	8
SD82114	6	5279	1	3162	1	2515	6	2022	7	5050	7	1379	15	2831	9
ID0180	24	3401	17	2630	12	2328	12	1610	16	5383	3	1471	12	2811	10
ND8215	10	4559	7	3033	4	2620	2	1937	10	4592	12	1745	2	2800	11
ND8212	9	4115	11	2730	9	2727	1	1874	11	4428	13	1575	8	2761	12
WT176	21	4148	10	2589	14	2228	14	1360	20	4935	10	1763	1	2685	13
SD78207-4	7	3797	14	2188	18	2215	15	1864	12	4947	9	855	20	2643	14
ND8407	12	4035	12	2628	13	2589	5	1661	15	3806	17	1652	6	2640	15
SD791231	8	4156	9	2476	17	1963	18	1843	14	4248	14	1431	13	2554	16
CI17439	2	3750	15	2770	8	2321	13	2021	8	3919	16	1727	3	2524	17
WT179	23	3344	18	2501	16	2409	8	1402	19	3630	19	1540	10	2466	18
WT177	22	3028	20	2092	20	2371	9	1545	17	3761	18	1382	14	2359	19
CI1442	1	3097	19	2656	11	1828	20	1502	18	3606	20	1580	7	2337	20
MEAN		4204		2682		2325		1870		4682		1483		2759	
LSD(.05)		1305		N.S.		N.S.		392		1889		448		310	
C.V.		11.0		18.5		12.5		22.4		13.7		13.6		13.8	

* Not included in state or regional averages.

Table 17. Mean yield, regression coefficient, correlation coefficient, and coefficient of determination from linear regression analysis of variety mean yield on nursery mean yield for the 26 entries in the 1988 Northern Regional Performance Nursery grown at 17 locations.

C.I. OR SEL. NO.	ENTRY NO.	MEAN YIELD OVER 17 LOCATIONS KG/HA	REGRESSION COEFFICIENT (b)	CORRELATION COEFFICIENT (r)	COEFFICIENT OF DETERMINATION (r^2)
NE82438	15	2475	1.24	0.96	0.92
NE83432	16	2472	1.20	0.96	0.93
NA-81-362-5	18	2467	1.16	0.94	0.88
XNH1354	20	2412	1.29	0.96	0.93
NE84581	17	2380	1.01	0.97	0.95
NE82656	14	2356	1.00	0.95	0.91
PI476975	3	2243	1.15	0.95	0.90
MT8039	26	2223	1.19	0.95	0.91
SD76463-16	5	2202	0.92	0.97	0.94
SD82114	6	2198	1.09	0.95	0.90
XH947	19	2183	1.18	0.92	0.85
ND8286	11	2157	1.01	0.97	0.95
ND8407	12	2155	0.94	0.97	0.95
ND8215	10	2100	1.03	0.97	0.94
SD82144	4	2098	1.01	0.97	0.95
ND8212	9	2009	0.89	0.95	0.91
ID0301	25	1982	1.12	0.91	0.84
ID0180	24	1912	0.96	0.92	0.84
SD791231	8	1900	0.97	0.97	0.94
SD78207-4	7	1882	0.94	0.94	0.88
WT176	21	1856	0.94	0.94	0.88
CI17439	2	1851	0.80	0.91	0.82
ND8460	13	1772	0.83	0.91	0.84
WT179	23	1765	0.78	0.94	0.89
CI1442	1	1755	0.62	0.92	0.84
WT177	22	1752	0.74	0.90	0.81

Table 18. Mean yield, regression coefficient, correlation coefficient, and coefficient of determination from linear regression analysis of variety mean yield on nursery mean yield for the 20 entries in the 1987 and 1988 Northern Regional Performance Nursery grown at 15 locations.

C.I. OR SEL. NO.	ENTRY NO.	MEAN YIELD OVER 15 LOCATIONS KG/HA	REGRESSION COEFFICIENT (b)	CORRELATION COEFFICIENT (r)	COEFFICIENT OF DETERMINATION (r^2)
NA-81-362-5	18	3172	1.12	0.94	0.88
NE82656	14	3082	1.09	0.95	0.89
MT8039	26	3048	1.26	0.97	0.93
NE82438	15	3001	1.06	0.91	0.83
PI476975	3	2890	1.09	0.95	0.91
ND8286	11	2875	1.04	0.97	0.95
SD76463-16	5	2850	0.90	0.97	0.93
SD82144	4	2844	1.10	0.97	0.94
SD82114	6	2831	1.07	0.95	0.91
ID0180	24	2811	1.17	0.94	0.88
ND8215	10	2800	1.03	0.97	0.95
ND8212	9	2761	0.95	0.97	0.94
WT176	21	2685	1.09	0.97	0.94
SD78207-4	7	2643	0.99	0.98	0.95
ND8407	12	2640	0.75	0.94	0.89
SD791231	8	2554	0.95	0.97	0.93
CI17439	2	2524	0.91	0.96	0.92
WT179	23	2466	0.89	0.96	0.92
WT177	22	2359	0.80	0.94	0.89
CI1442	1	2337	0.71	0.95	0.90

Table 19. Summary of agronomic and yield data for 26 wheats in the 1988 Northern Regional Performance Nursery.

C.I. OR SEL. NO.	ENTRY NO.	PLANT HEIGHT CM	LODGING 0-5	STRAW STRENGTH 1-5	DAYS TO HEADING FROM 1/1	DAYS TO RIPENING FROM 1/1	WINTER SURVIVAL %	LEAF RUST SEVERITY %	STEM RUST SEVERITY %	BYD VIRUS 0-9	VOLUME WEIGHT KG/HL	YIELD KG/HA
NUMBER OF LOCATIONS		18	2	1	18	1	2	2	1	1	19	17
NE82438	15	64	0	2	151	191	93	7	5	2	72.3	2475
NE83432	16	64	1	3	151	188	87	7	60	4	73.7	2472
NA-81-362-5	18	60	1	1	149	183	63	5	50	2	75.4	2467
XNH1354	20	65	0	2	152	189	80	23	90	6	73.3	2412
NE84581	17	65	1	2	151	184	79	1	5	2	73.3	2380
NE82656	14	67	1	3	150	185	89	5	5	3	72.7	2356
PI476975	3	59	1	2	149	184	74	16	1	2	73	2243
MT8039	26	70	0	3	151	186	55	20	10	2	70.2	2223
SD76463-16	5	72	2	3	151	185	76	5	50	2	74.2	2202
SD82114	6	68	2	3	150	185	81	6	10	2	73.8	2198
XH947	19	64	1	2	150	185	58	8	50	2	71.3	2183
ND8286	11	71	1	3	153	187	98	9	10	1	72.6	2157
ND8407	12	75	1	3	152	188	93	4	5	1	72	2155
ND8215	10	74	1	2	153	187	84	3	5	2	69.7	2100
SD82144	4	70	1	3	150	182	92	9	1	2	72.9	2098
ND8212	9	71	1	2	154	186	94	22	1	2	69.5	2009
ID0301	25	63	1	3	153	188	54	14	90	7	71.6	1982
ID0180	24	66	1	3	155	188	66	14	90	3	70.8	1912
SD791231	8	69	1	3	152	187	80	5	10	4	73.8	1900
SD78207-4	7	68	1	3	152	191	90	3	20	3	73.9	1882
WT176	21	73	2	4	155	189	77	6	90	2	70.7	1856
CI17439	2	72	1	3	153	185	98	10	10	1	73	1851
ND8460	13	75	1	3	153	188	74	2	10	2	73.6	1772
WT179	23	71	1	3	155	189	83	6	10	2	71.9	1765
CI1442	1	76	4	4	153	187	76	13	30	3	73.7	1755
WT177	22	72	2	4	154	190	83	7	10	2	72.5	1752

Table 20. Seedling reaction of entries of the 1988 Northern Regional Performance Nursery to selected isolates of Puccinia graminis f.sp. tritici (by D. V. McVey, U.S.D.A., A.R.S., Cereal Rust Laboratory, U. of MN, St. Paul, MN).

		Reaction produced by isolates							
		72- 00- 1370C QFBS	69- 21- 399 QSHS	71- 21- 584B RHRS	72- 25- 639C RKQS	72- 00- 53A RTQQ	72- 01- 4A TNMH	74- 21- 1409A TNMK	
No.	Name or sel. no.	151		11-32-113			15B-2		Spec. sr gene
1	Kharkof	s	s	s	s	s	s	s	none
2	Roughrider	;	0	s	s	s	x	x	36
3	Colt	;	2	2	2-	;1-n	;	;	6,17,8,9a,11
4	SD82144	23	2	23	s	;1n+,s	;,s	s	Seg.17,+
5	SD76463-16	2	2-	2=	2-	;	;	2=	17,24
6	SD82114	2,;	23	23	2	;1+n	;,s	2,;,s	10,Seg.6 +
7	SD78207-4	;	;,s	2-	--	;	;,s	s	8,17,36
8	SD791231	;1	2=	;2-	;1	;,2-	2-,;	;,2	Seg.6&17 +
9	ND8212	;	;	2	23	32	;	;	6,36,+
10	ND8215	;,s	23	23	23	32	;	;	6,+
11	ND8286	;1	0	2-	;1	23	x	x	36,+
12	ND8407	;	2	2	s	;1n	;	;	7b,8,6,17,+
13	ND8460	;	0	;	;1	2=	;,2-	;,2=	11,36,Seg.6
14	NE82656	;	1cn	2=	2-	;	;	;	6,17,24
15	NE82438	;	2=	;1-	;1-	2=	;	;	6,24
16	NE83432	;1	2=	;1-	2=	2=	2=,s	2=	24 &/or 31
17	NE84581	;	s	2	;1n	;1-n	;	;	6,8,10,17
18	NA-81-362-5	;1	2=	;1	2=	2=	2	2	+
19	XH947	;,s	2-,s	s	2,s	2,s	;1,s	x,s	Seg.6,+
20	XNH1354	s	s	s	s	s	s	s	none
21	WT176	s	s	s	s	s	s	s	none
22	WT177	1	0	23	x-	s	s	s	36
23	WT179	s,;1	0,s	s	x	x	s	s	Seg.36
24	ID0180	2	2=	2	2	2-	s	s	Tmp
25	ID0301	12n	s	s	;1n	;1n	s	s	Sr 10
26	MT8039	s	s	s	s	s	s	s	none

n = necrosis
NA-81-362-5 = Abilene

Table 21. Adult plant field reaction of entries of the 1988 Northern Regional Performance Nursery to Puccinia graminis f.sp. tritici (by D. V. McVey, U.S.D.A., A.R.S., Cereal Rust Laboratory, U. of MN, St. Paul, MN).

No.	Name or sel. no.	Stem rust 6/22	Stem rust 7/1
1	Kharkof	TS	30S
2	Roughrider	0	TS
3	Colt	0	20MS
4	SD82144	0	5MR
5	SD76463-16	0	0
6	SD82114	0	0
7	SD78207-4	0	10MR-MS
8	SD791231	0	20MS
9	ND8212	0	TMR
10	ND8215	0	10MS-S
11	ND8286	0	TMR
12	ND8407	0	10MS
13	ND8460	0	TR
14	NE82656	0	TR
15	NE82438	0	10MR
16	NE83432	0	30MR-MS
17	NE84581	0	0
18	NA-81-362-5	TR	TR
19	XH947	0	TR
20	XNH1354	30S	60S
21	WT176	30S	40S
22	WT177	TS	TS
23	WT179	0	TR
24	ID0180	TS	40S
25	ID0301	20S	60S
26	MT8039	20S	30S

Table 22. Hessian fly reaction, Great Plains biotype, 1988 Northern Regional Performance Nursery. (Data provided by J. H. Hatchett, USDA-ARS, Manhattan, KS.)

ENTRY NO.	C.I. OR SEL. NO.	REACTION TYPE	NO. OF PLANTS R	NO. OF PLANTS S
1	CI1442	H	5	19
2	CI17439	H	4	21
3	PI476975	H	19	5
4	SD82144	S		
5	SD76463-16	S		
6	SD82114	H	6	17
7	SD78207-4	S		
8	SD791231	H	5	18
9	ND8212	S		
10	ND8215	S		
11	ND8286	H	15	12
12	ND8407	H	15	15
13	ND8460	S		
14	NE82656	H	25	4
15	NE82438	H	18	5
16	NE83432	S		
17	NE84581	S		
18	NA-81-362-5	S		
19	XH947	S		
20	XNH1354	S		
21	WT176	S		
[illegible]	[illegible]77	R		
	79	S		
	[illegible]80	S		
		S		
		S		

Table 23. Virus reactions of entries in the 1988 Northern Regional Performance Nursery. (Data provided by A. D. Hewings and F. L. Kolb, Urbana, Illinois.)

ENTRY NO.	C.I. OR SEL. NO.	BARLEY YELLOW DWARF 0-9	SOILBORNE MOSAIC 0-9	
			Rep 1	Rep 2
1	CI1442	4	7	7
2	CI17439	5	7	7
3	PI476975	2	6	7
4	SD82144	2	8	8
5	SD76463-16	6	8	8
6	SD82114	4	8	9
7	SD78207-4	7	6	7
8	SD791231	7	6	7
9	ND8212	3	7	7
10	ND8215	7	8	8
11	ND8286	6	8	7
12	ND8407	4	8	7
13	ND8460	6	3	3
14	NE82656	7	6	7
15	NE82438	6	5	6
16	NE83432	6	8	8
17	NE84581	3	4	5
18	NA-81-362-5	6	3	3
19	XH947	4	7	7
20	XNH1354	7	6	7
21	WT176	3	6	5
22	WT177	5	7	8
23	WT179	7	7	7
24	ID0180	3	8	8
25	ID0301	8	7	8
26	MT8039	6	3	4

Table 24. Aluminum tolerance of lines tested in the 1988 NRPN based on hematoxylin staining of seedling roots. (Data provided by B. F. Carver, Stillwater, OK)

Entry No.	Selection No.	Stain Intensity[a] Al Concentration (mM) 0.18	0.36	0.72	Rating[b]
1	Kharkof	C/P	C	C	VS-MS*
2	Roughrider	C	C	C	VS
3	Colt	P	C	C	MS
4	SD82144	P/C	C/P	C	VS-I*
5	SD76463-16	C/P	C	C	VS-MS*
6	SD82114	C/P/N	C/P	C/P	VS-T*
7	SD78207-A	C	C	C	VS
8	SD791231	C/P	C/P	C	VS-I*
9	ND8212	C	C	C	VS
10	ND8215	C	C	C	VS
11	ND8286	C	C	C	VS
12	ND8407	N	P	P	T
13	ND8460	C	C	C	VS
14	NE82656	P	C	C	MS
15	NE82438	C/P	C	C	VS-MS*
16	NE83432	P	C	C	MS
17	NE84581	P	P	C	I
18	NA-81-362-5	P	P/C	C	MS-I*
19	XH947	C/P	C/P	C	VS-I*
20	XNH1354	C	C	C	VS
21	WT176	N	P	P/C	I-T*
22	WT177	N	N	P	T
23	WT179	N/C	C/P	C/P	VS-T*
24	ID0180	N	P	P/C	I-T*
25	ID0301	C	C	C	VS
26	MT8039	P	P	C	I

[a] C, P, and N = complete, partial, and no staining of root tips, respectively.

[b] VS = very susceptible, MS = moderately susceptible, I = intermediate and T = tolerant ($\leq$ 0.72 mM Al); * = heterogeneous response; predominant stain intensity listed first for each Al concentration.

QUALITY DATA

Composites of 1-lb samples of each SRPN and NRPN entry from each harvested nursery site are evaluated at the Hard Red Winter Wheat Quality Laboratory at Manhattan, Kansas. Results are reported to cooperators by the laboratory and are not included in this report.

UNIFORM WINTERHARDINESS NURSERIES

The nurseries are comprised of Southern and Northern Materials Sections. In 1988 the Southern Section contained 141 entries and the Northern Section 114 entries. Nursery lists and survival data from test sites at which differential winter survival occurred appear in the tabulations that follow.

SOIL-BORNE MOSAIC NURSERY

The nursery contained 99 entries in 1988. Infection data were reported from Urbana, IL, Lincoln, NE and Manhattan, KS. The nursery list and reaction data are included herein.

1988
Uniform Winterhardiness Nursery
Southern Section

Entry No.	Variety or Pedigree	Sel. No.	Source
1	Warrior	CI13190	Check
2	HiPlains/Wings/3/Parker*4/Agent//Belot.198/Lcr	NE82438	Nebraska
3	CIMMYT/Scout//Agate/Sage Sib	NE82533	"
4	Brule/3/Parker*4/Agent//Belot.198/Lcr	NE82656	"
5	CIMMYT/Scout//Bennett Sib/4/Parker 4*/Agent//Belot.198/Lcr/3/Bez 1/Ctk 78	NE83404	"
6	" "	NE83406	"
7	" "	NE83407	"
8	Wrr*5/Agent//Kavkaz/4/Parker*4/Agent//Belot.198/Lcr/3/Vona	NE83498	"
9	Wrr/Sut//MoW6811/3/Agate Sib/4/NE68457/Ctk78	NE84557	"
10	Scout 66	CI13996	Check
11	Bez 1/Ctk78//Arthur/Ctk78/3/Bennett	NE84581	Nebraska
12	(FNT/MI/Hope)//Pnc/2*Cnn/3/Pnc/3*Cnn/4/Pnc/2*Cnn//ILL#1-CNS-TT1/Sando60/5/Vona/6/Wrr*5/Agent//Kavkaz	NE83432	"
13	78GH1051 x Mara/2*Sut//Sentinel (NE74649)	NE85556	"
14	84MC22	NE85623	"
15	Wrr*5/Agent//Kavkaz NE77637xNE63218//Ky58/Nth/2*(CTMH) (NE61983)//Pnc/2*Cnn	NE85707	"
16	Wrr*5/Agent//NE69441 NE76667xNewton	NE86482	"
17	Colt/3/Wrr*5/Agent//Kavkaz	NE86487	"
18	" "	NE86488	"
19	" "	NE86494	"
20	Vona	CI17441	Check
21	Colt/Cody	NE86499	Nebraska
22	"	NE86501	"
23	"	NE86502	"
24	"	NE86503	"
25	"	NE86507	"
26	"	NE86509	"
27	Colt Sib NE78697/3/Wrr*5/Agent//Kavkaz	NE86527	"
28	Colt/Cody	NE86582	"
29	Colt//Bez 1/Ctk78//Arthur/Ctk78	NE86592	"
30	Warrior	CI13190	Check
31	Wrr/Sut//MoW6811//Agate Sib NE77615//Cody	NE86606	Nebraska
32	" "	NE86607	"
33	CLLF/Sturdy/3/Diba/Diga//Suwon92/CI13645/4/NE7060	NE87U101	"
34	6TA131/Dwf Sel 6TA131//Fain Tcl Sel/Ctk78	NE83T12	"
35	Fain Tcl/Ctk78 x Ctk78/6A35/NE69150 x TxTcl#50//NE69150/S-339//TxTcl#50 x NE69150 x Tcl 6TA876	NE86T666	"
36	H15A13333/3/5*Larned/Eagle//Sage/4/TAM105	KS87H6	Kansas (Hays)
37	" "	KS87H15	"
38	" "	KS87H22	"
39	" "	KS87H57	"
40	Scout 66	CI13996	Check

41	H15A13333/3/5*Larned/Eagle//Sage/4/TAM105	KS87H58	Kansas (Hays)
42	GHP2 X211	KS87H63	"
43	"	KS87H64	"
44	"	KS87H65	"
45	"	KS87H66	"
46	"	KS87H67	"
47	H15A13333/3/5*Larned/Eagle//Sage/4/Dodge sib	KS87H264	"
48	Agent/Tascosa//Sturdy	TX71D4876-V5	Texas (Dallas)
49	Amigo/TX71A106-5	TX82D4751	"
50	Vona	CI17441	Check
51	TX75D3165/Amigo	TX84D1265	Texas (Dallas)
52	Victory//Payne/Len	TX86D1305	"
53	Thunderbird//Norseman/Collin	TX86D1308	"
54	Thunderbird//Payne/Collin	TX86D1310	"
55	TX71C8130-R/Veery #4	TX86D1613	"
56	Bulk Selection	Thunderbird	NAPB
57	OK11252A/W79-1226	Abilene	"
58	Experimental Line	XW163	Pioneer
59	"	HBY261B	"
60	Warrior	CI13190	Check
61	Experimental Line	HBY756A	Pioneer
62	"	HBY762A	"
63	"	HBY383A	"
64	"	HBY385D	"
65	Kharkof	CI1442	Check
66	Scout 66	CI13996	"
67	TAM-105	CI17826	"
68	Aurora/2*TAM W-101	OK84343	Oklahoma
69	Payne*2/CO725052	OK84286	"
70	Scout 66	CI13996	Check
71	" "	OK84287	Oklahoma
72	Hawk/OK80099	OK86197	"
73	OK79257/Century Sib/2/Chisholm	OK86215	"
74	TAM W-101*4/Amigo*4//Largo	TXGH10989	Texas
75	Sturdy*3/Amigo	TX81V6582-2	"
76	TAM-105*4/Amigo*4//Largo	TXGH10563B	"
77	KS73146/TX71A1039	TX84V1336	"
78	TX71A562-6*4/Amigo*4//Largo	TXGH13622	"
79	TX71A374-4/TX71A1039-V1	TX84V1217	"
80	Vona		
81	TX71A1039-V1*3/Amigo		
82	TAM-106 resel./TX69D4819		
83	TAM-108/Arkan		
84	Rannaya/NE701136//CI13449/Ctk		
85	" "		
86	74F878/Wings//Vona		
87	74cb462/Trapper//Vona		
88	CO5926//7C/Tobari 63/3/Baca		
89	74cb452/Vona//Baca		
90	Warrior		

91	Bison/Sterling//3*Scout/3/Eagle/4/ Pinnacle/2*Eagle	KS84HW196	Kansas
92	Bulk Selection	KS82C2338	"
93	KS73167/Agate//Sage sib	NE82533	Nebraska
94	Wrr/Sut//MoW6811/3/Agate Sib/4/NE68457/Ctk78	NE84557	"
95	CIMMYT/Scout//Bennett Sib/4/Parker*4/Agent //Belot.198/Lcr/3/Bez 1/Ctk78	NE83407	"
96	Brule/3/Parker*4/Agent//Belot.198/Lcr	NE82656	"
97	Winter Wheat Line	RL844677	Rohm & Haas
98	Winter Wheat Line	RL845472	"
99	HRW Selection	AGC-112	Seed Research
100	Scout 66	CI13996	Check
101	" "	AGC-113	Seed Research
102	Bezostaya/TAM W-101//W558	XW141	Pioneer
103	TAM W-101/W603//W558	XW161	"
104	Winter Wheat Hybrid	XH675	HybriTech
105	" "	XH685	"
106	Bounty Hybrid Wheat	Bounty-122	Cargill
107	" "	WH180001	"
108	W79-227/Payne	NA-W84-229	NAPB
109	Payne/W78-069	NA-W83-256	"
110	Vona	CI17441	Check
111	OK11252A/W79-1226	NA-W81-162-W	NAPB
112	IL77-4259/IL76-3845	IL83-7439	Illinios
113	TX69A330/IL76-3820	IL80-1251	"
114	CHA Hybrid Mustang/3/T-105*4/Amigo*4//Largo, TXGH10289	TX87HA1	Texas
115	(7C-CNO/Cal.)/Baca//Vona	C0820026	Colorado
116	74F878/Wings//Vona	C0820009	"
117	74CB452/Vona//Baca	C0830014	"
118	74cb462/Trapper//Vona	C0830027	"
119	Mir.808/Vona	C0840015	"
120	Warrior	CI13190	Check
121	Mir.808/Vona	C0840016	Colorado
122	"	C0840032	"
123	Newton/Baca//Vona	C0840050	"
124	Newton/Baca//Newton	C0840062	"
125	(CLLF2/Pch)/Vona//Tpr	C0840111	"
126	Emy/Ctk//Sandy/3/Vona	C0840136	"
127	NS14/NS603//Nwt/3/PB835	C0850034	"
128	NS14/NS25//2*Vona	C0850060	"
129	Buck Buck "s"/NA434//Vona	C0850104	"
130	Scout 66	CI13996	Check
131	F51/F71//77F50362/3/Vona	C0850166	Colorado
132	Bez 1/Sava//Ctk/3/C0710125	C0850202	"
133	NS14/NS83//Tpr/3/Vona	C0850213	"
134	Buck Buck "s"/Ctk//Vona	C0850246	"
135	F16/F71//Nwt/3/Vona	C0850260	"
136	Kal/Bb//Cj71"s"/3/Hork "s"/4/77F50362/5/Vona	C0850267	"
137	Veery "s"/Vona//Pb835	C0850273	"
138	Siouxland Composite	TXSXLD	Texas
139	Siouxland	SXLD	Nebraska
140	Winter Wheat Line	RH7846	Rohm & Haas
141	Vona	CI17441	Check

1988 Uniform Winterhardiness Nursery
Southern Section

Entry	Casselton, ND		Highmore, SD		St. Paul, MN		Mead, NE	
	Rep 1	Rep 2	Rep 1	Rep 2	Rep 1	Rep 2	Rep 1	Rep 2
	% survival							
1	80	75	100	100	100	100	100	100
2	80	70	100	100	100	100	100	100
3	70	20	100	100	100	100	100	100
4	80	80	100	100	100	100	100	100
5	80	70	100	100	100	100	100	100
6	85	75	100	100	100	100	100	100
7	85	75	100	100	100	100	100	100
8	80	75	100	80	100	100	100	100
9	60	50	100	100	100	100	100	100
10	85	60	100	100	100	100	100	100
11	80	55	100	100	100	100	100	100
12	90	60	100	100	100	100	100	100
13	75	5	100	100	100	100	100	100
14	30	20	100	100	100	100	90	90
15	85	60	100	100	100	100	100	100
16	75	40	100	100	100	100	100	100
17	80	30	100	100	100	100	100	100
18	75	0	100	100	100	100	100	100
19	75	10	100	100	100	100	100	100
20	45	10	100	100	100	100	100	100
21	60	50	100	100	100	100	100	100
22	55	50	100	100	100	100	100	100
23	50	60	100	100	100	100	100	100
24	60	70	100	100	100	100	100	100
25	65	75	100	100	100	100	100	100
26	60	75	100	100	100	100	100	100
27	40	70	100	100	100	100	100	100
28	35	70	100	100	100	100	100	100
29	50	75	100	100	100	100	100	100
30	75	80	100	100	100	100	100	100
31	60	60	100	100	100	100	100	100
32	65	60	100	100	100	100	100	100
33	45	50	100	100	100	100	100	100
34	40	55	100	100	100	100	100	100
35	30	60	100	100	100	100	100	100
36	60	60	100	100	100	100	100	90
37	65	70	100	100	100	100	100	100
38	65	60	100	100	100	100	100	100
39	40	60	100	100	100	100	100	100
40	65	75	100	100	100	100	100	100
41	40	80	100	100	100	100	100	100
42	75	80	100	100	100	100	100	100
43	45	85	100	100	100	100	100	100
44	50	85	100	100	100	100	100	100
45	70	85	100	100	100	100	100	100
46	0	30	100	100	100	100	100	100
47	0	45	100	100	100	100	100	100
48	5	55	100	100	100	100	90	100
49	5	55	100	40	100	100	90	80

1988 UWHN, Southern Section

Entry	Casselton, ND		Highmore, SD		St. Paul, MN		Mead, NE	
	Rep 1	Rep 2	Rep 1	Rep 2	Rep 1	Rep 2	Rep 1	Rep 2
	% survival							
50	10	60	100	100	100	100	100	100
51	5	20	100	100	100	100	50	40
52	5	90	100	100	100	100	100	100
53	0	20	100	100	0	15	20	20
54	5	85	100	60	100	100	100	100
55	0	70	100	90	0	15	70	60
56	20	90	100	100	100	100	100	100
57	15	90	100	100	100	100	100	100
58	10	90	100	100	100	100	100	100
59	15	95	100	100	100	100	100	100
60	70	95	100	100	100	100	100	100
61	75	95	100	100	100	100	100	100
62	50	90	100	100	100	100	100	100
63	30	90	100	100	100	100	100	100
64	30	90	100	100	100	100	100	100
65	45	90	100	100	100	100	100	100
66	50	90	100	100	100	100	100	100
67	30	80	100	100	100	100	100	100
68	0	60	100	100	100	100	80	80
69	20	75	100	100	100	100	100	100
70	55	90	100	100	100	100	100	100
71	50	85	100	100	100	100	100	100
72	50	75	100	100	100	100	100	100
73	60	70	100	100	100	100	100	100
74	0	20	30	100	0	50	80	80
75	5	40	30	100	100	100	90	100
76	75	80	100	100	100	100	100	100
77	60	30	100	100	100	100	80	100
78	45	60	100	100	100	100	90	100
79	0	55	100	100	100	100	100	100
80	20	55	100	100	100	100	100	100
81	0	40	100	100	100	100	70	80
82	10	70	100	100	100	100	100	100
83	10	70	100	100	100	100	100	100
84	10	75	100	100	100	100	100	100
85	10	80	100	100	100	100	100	100
86	0	80	100	100	0	7	100	100
87	0	75	100	100	100	100	100	100
88	0	80	100	100	100	100	100	100
89	0	45	100	100	100	100	70	100
90	30	90	100	100	100	100	100	100
91	5	75	100	100	100	100	100	100
92	5	75	100	100	100	100	100	100
93	30	80	100	90	100	100	100	100
94	40	85	100	90	100	100	100	100
95	80	90	100	100	100	100	100	100
96	85	95	100	100	100	100	100	100
97	50	85	100	100	100	100	100	100
98	70	90	100	100	100	100	100	100
99	75	95	100	100	100	100	100	100

1988 UWHN, Southern Section

Entry	Casselton, ND		Highmore, SD		St. Paul, MN		Mead, NE	
	Rep 1	Rep 2	Rep 1	Rep 2	Rep 1	Rep 2	Rep 1	Rep 2
	% survival							
100	75	95	100	100	100	100	100	100
101	20	85	100	100	100	100	100	90
102	45	85	90	100	100	100	100	90
103	45	85	100	100	100	100	100	100
104	50	85	100	100	100	100	100	100
105	40	85	100	100	100	100	100	100
106	0	70	100	100	100	100	100	100
107	0	70	100	100	100	100	90	90
108	0	75	100	100	100	100	100	100
109	40	90	100	100	100	100	100	100
110	10	80	20	100	100	100	100	100
111	10	80	100	100	100	100	100	100
112	80	95	100	100	100	100	100	100
113	75	95	100	100	100	100	100	100
114	75	95	100	100	100	100	100	100
115	50	90	50	100	100	100	100	100
116	10	85	100	100	100	100	100	100
117	5	70	100	100	100	100	90	100
118	0	70	90	100	100	100	100	100
119	10	75	100	100	100	100	100	100
120	75	95	100	100	100	100	100	100
121	5	25	100	100	100	100	100	90
122	20	75	100	100	100	100	100	100
123	0	70	100	100	100	100	100	100
124	0	70	100	100	100	100	100	100
125	5	70	100	100	100	100	100	100
126	0	60	100	100	100	100	100	100
127	0	60	100	100	100	100	100	100
128	0	50	100	30	100	100	100	100
129	0	70	100	100	100	100	100	100
130	30	80	100	100	100	100	100	100
131	0	75	100	100	100	100	100	100
132	0	75	100	100	100	100	100	100
133	5	85	100	100	100	100	100	100
134	0	50	100	100	100	100	90	100
135	0	65	100	100	100	100	100	100
136	0	60	100	100	100	100	100	100
137	0	70	100	100	100	100	100	100
138	50	85	100	100	100	100	100	100
139	60	85	100	100	100	100	100	100
140	5	50	100	100	100	100	100	100
141	5	50	100	100	100	100	100	100

1988
Uniform Winterhardiness Nursery
Northern Section

Entry No.	Variety or Pedigree	Sel. No.	Source
1	Norstar	CI17735	Check
2	NE7763//Ctk/ND7777	ND8501	No. Dakota
3	SD74221//Frd/ND7712	ND8511	"
4	Translocation C/CI8888	ND8523	"
5	ND7601//Ctk/ND7601	ND8530	"
6	ND7723//Rrr/ND7620	ND8536	"
7	Ctk/ND7637//Ctk/ND7655	ND8581	"
8	ND7735-11//Wnk/Newton	ND8585	"
9	ND7735-4//Rrr/Solar	ND8589	"
10	Warrior	CI13190	Check
11	ND7735-28/Siouxland	ND85100	No. Dakota
12	" "	ND85103	"
13	ND7735-34/KS79379	ND85105	"
14	ND7735-34/KS79346	ND85111	"
15	"	ND85114	"
16	ND7735-38/KS79379	ND85118	"
17	ND7620/Siouxland	ND85137	"
18	ND7882/Rose	ND8603	"
19	SD75314/MT7431	ND8626	"
20	Centurk 78	CI17724	Check
21	ND7714/SD75314	ND8638	No. Dakota
22	"	ND8640	"
23	"	ND8645	"
24	ND7771/SD75284	ND8651	"
25	ND7771/Rrr	ND8654	"
26	"	ND8655	"
27	ND7731/Siouxland	ND8660	"
28	Ctk/ND78103	ND8664	"
29	Rose/ND7481	ND8677	"
30	Norstar	CI17735	Check
31	Rose/ND7481	ND8679	No. Dakota
32	SD73177/ND7703	ND8683	"
33	SD75284/Siouxland	ND8692	"
34	"	ND8694	"
35	"	ND8698	"
36	ND7659/Agate	ND86105	"
37	ND7611/Rrr	ND86120	"
38	Rrr/NK76W239	ND86136	"
39	Winalta/ND7637	ND86140	"
40	Warrior	CI13190	Check
41	Winoka	SDM8127	So. Dakota
42	"	SDM16029	"
43	"	SDM16050	"
44	"	SDM16069	"
45	"	SDM16085	"

Winoka	SDM16091 So. Dakota
"	SDM16116 "
"	SDM16129 "
"	SDM16132 "
Centurk 78	CI17724 Check
Winoka	SDM16149 So. Dakota
"	SDM16156 "
"	SDM16166 "
"	SDM16169 "
"	SDM16187 "
"	SDM16208 "
"	SDM17011 "
"	SDM17021 "
"	SDM17025 "
Norstar	CI17735 Check
Winoka	SDM17032 So. Dakota
"	SDM17033 "
"	SDM17055 "
"	SDM17074 "
"	SDM17083 "
"	SDM17087 "
"	SDM17088 "
Winoka	Winoka "
ID0033/PR04930//Mld/Lind	SD87123 "
Warrior	CI13190 Check
ID0033/PR04930//Mld/Lind	SD87124 So. Dakota
" "	SD87125 "
" "	SD87126 "
Nwt/SD56281	SD87127 "
"	SD87128 "
"	SD87131 "
Sage/Art//BTY309/2*Rri	SD87138 "
" "	SD87140 "
Lcr/Frd//NE69559/Wnk/3/Nell	SD87143 "
Centurk 78	CI17724 Check
Lcr/Cnn//YTO-117-20/Ctk/3/Alab	SD87145 So. Dakota
Sage/Art//Hpl/ND7747	SD87148 "
Lco/Frd//NE69559/Wnk*4/3/TX71A30	SD87155 "
Lcr/Cnn//YTO117-20/Ctk/3/Nwt	SD87141 "
Kharkof	CI1442 Check
Roughrider	CI17439 "
Colt	PI476975 "
CI15322//Agate/4*Scout 66/3/Ctk 78/4/SD74221	SD82144 So. Dakota
CI15322//3*(Agent/4*Scout66)	SD76463-16 "
Norstar	CI17735 Check
SD74221*2/Lathrop	SD82114 So. Dakc
SD76109/Rose	SD78207-4 "
SD76669*2/KS71591	SD791231 "
Rrr//Yogo/Trapper	
Rrr/3/Froid//Winoka/WW8	
Rrr*2/1809	
Ctk/3/Froid*2//ND363/ND269	
Rrr/FO.1527	
Brule/3/Parker*4/Agent//Belot.198/Lcr	
Warrior	

101	HiPlains/Wings/3/Pkr*4/Agent//Belot.198/Lcr	NE82438	Nebraska
102	(FTN/MI/Hope)//Pnc/2*Cnn/3/Pnc/3*Cnn/4/ Pnc/2*Cnn//ILL#1-Cns-TTi (CTMH)/ Sando60/5/Vona/6/Wrr*5/Agent//Kavkaz	NE83432	"
103	Bez 1/Ctk78//Arthur/Ctk78/3/Bennett	NE84581	"
104	OK11252A/W76-1226 (Abilene)	NA-81-362-5	NAPB
105	Winter Wheat Hybrid	XH947	HybriTech
106	" "	XNH1354	"
107	Kharkov 22 MC/Bezostaya 1	WT176	Lethbridge
108	Norstar/Rrr	WT177	"
109	"	WT179	"
110	Centurk 78	CI17724	Check
111	Turkey/Burt//Bezostaya 1	ID0180	Lethbridge
112	Hgl/ID5006/4/II-60-156/CI14107//It/3/ 2Cnn/PI178383	ID0301	Idaho
113	Lancota/Froid//NE69559/Wnk	MT8039	Montana
114	Norstar	CI17735	Check

1988 Uniform Winterhardiness Nursery
Northern Section

Entry	Casselton, ND		Highmore, SD	
	Rep 1	Rep 2	Rep 1	Rep 2
	% Survival			
1	95	75	100	100
2	80	75	100	100
3	85	85	100	100
4	90	80	100	100
5	80	75	100	100
6	80	75	100	100
7	75	80	100	100
8	85	90	100	100
9	90	90	100	100
10	85	75	100	100
11	80	80	100	100
12	75	85	100	100
13	80	95	100	100
14	75	95	100	100
15	80	95	100	100
16	80	95	100	100
17	80	90	100	90
18	75	90	100	100
19	70	90	90	100
20	30	90	100	100
21	75	90	100	100
22	75	90	100	100
23	80	80	100	100
24	75	80	100	100
25	85	80	100	100
26	90	90	100	100
27	75	90	100	100
28	60	85	100	100
29	70	80	100	100
30	80	85	100	100
31	90	80	100	100
32	85	80	100	100
33	45	80	100	100
34	70	80	100	100
35	70	80	100	100
36	75	80	100	100
37	90	90	100	100
38	90	85	100	100
39	90	90	100	100
40	85	85	100	100
41	80	85	100	100
42	70	80	100	100
43	75	80	100	100
44	75	80	100	100
45	60	75	100	100
46	40	75	100	100
47	40	70	100	100
48	35	85	100	100
49	25	70	100	100

1988 UWHN, Northern Section

Entry	Casselton, ND		Highmore, SD	
	Rep 1	Rep 2	Rep 1	Rep 2
	% Survival			
50	20	60	100	100
51	20	60	70	100
52	25	65	100	100
53	10	60	100	100
54	10	50	100	100
55	10	60	100	90
56	15	55	100	100
57	30	50	100	100
58	10	50	100	100
59	5	15	100	100
60	95	80	100	100
61	10	30	100	100
62	10	15	40	100
63	5	20	30	100
64	10	45	80	100
65	0	35	100	100
66	0	35	100	100
67	0	25	100	100
68	10	60	100	100
69	30	45	100	100
70	25	45	100	100
71	40	45	100	100
72	40	50	100	100
73	45	40	100	100
74	30	40	100	100
75	20	40	100	100
76	10	55	100	100
77	5	80	100	100
78	15	80	100	100
79	60	80	100	100
80	45	75	100	100
81	15	75	100	100
82	30	75	100	100
83	85	80	100	100
84	75	80	100	100
85	75	85	100	100
86	80	90	100	100
87	70	60	100	100
			100	100
			100	100
			100	100
			90	100
			100	100
			100	100
			100	100
			100	100
			100	100
			100	100
			80	100
			90	100

1988 UWHN, Northern Section

Entry	Casselton, ND		Highmore, SD	
	Rep 1	Rep 2	Rep 1	Rep 2
	% Survival			
100	35	85	100	100
101	30	90	100	100
102	75	90	100	100
103	65	80	100	100
104	70	70	100	100
105	60	55	100	100
106	65	60	100	100
107	90	90	100	100
108	85	90	100	100
109	90	95	100	100
110	25	35	100	100
111	85	60	100	100
112	75	55	100	100
113	75	50	100	100
114	90	95	100	100

1988
Soilborne Mosaic Nursery

Entry No.	Variety or Pedigree	Sel. No.	Source
1	Pawnee	CI11669	Check
2	HiPlains/Wings/3/Parker*4/Agent//Belot.198/Lcr	NE82438	Nebraska
3	CIMMYT/Scout//Agate/Sage Sib	NE82533	"
4	Brule/3/Parker*4/Agent//Belot.198/Lcr	NE82656	"
5	CIMMYT/Scout//Bennett Sib/4/Parker 4*/Agent//Belot.198/Lcr/3/Bez 1/Ctk 78	NE83404	"
6	" "	NE83406	"
7	" "	NE83407	"
8	Wrr*5/Agent//Kavkaz/4/Parker*4/Agent//Belot.198/Lcr/3/Vona	NE83498	"
9	Wrr/Sut//MoW6811/3/Agate Sib/4/NE68457/Ctk78	NE84557	"
10	Concho	CI12517	Check
11	Bez 1/Ctk78//Arthur/Ctk78/3/Bennett	NE84581	Nebraska
12	(FNT/MI/Hope)//Pnc/2*Cnn/3/Pnc/3*Cnn/4/Pnc/2*Cnn//ILL#1-CNS-TT1/Sando60/5/Vona/6/Wrr*5/Agent//Kavkaz	NE83432	"
13	78GH1051 x Mara/2*Sut//Sentinel (NE74649)	NE85556	"
14	84MC22	NE85623	"
15	Wrr*5/Agent//Kavkaz NE77637xNE63218//Ky58/Nth/2*(CTMH) (NE61983)//Pnc/2*Cnn	NE85707	"
16	Wrr*5/Agent//NE69441 NE76667xNewton	NE86482	"
17	Colt/3/Wrr*5/Agent//Kavkaz	NE86487	"
18	" "	NE86488	"
19	" "	NE86494	"
20	Bison	CI12518	Check
21	Colt/Cody	NE86499	Nebraska
22	"	NE86501	"
23	"	NE86502	"
24	"	NE86503	"
25	"	NE86507	"
26	"	NE86509	"
27	Colt Sib NE78697/3/Wrr*5/Agent//Kavkaz	NE86527	"
28	Colt/Cody	NE86582	"
29	Colt//Bez 1/Ctk78//Arthur/Ctk78	NE86592	"
30	Pawnee	CI11669	Check
31	Wrr/Sut//MoW6811//Agate Sib NE77615//Cody	NE86606	Nebraska
32	" "	NE86607	"
33	CLLF/Sturdy/3/Diba/Diga//Suwon92/CI13645/4/NE7060	NE87U101	"
34	H15A13333/3/5*Larned/Eagle//Sage/4/TAM105	KS87H6	Kansas (Hays)
35	" "	KS87H15	"
36	" "	KS87H22	"
37	" "	KS87H57	"
38	" "	KS87H58	"
39	GHP2 X211	KS87H63	"
40	Concho	CI12517	Check

41	GHP2 X211	KS87H64	Kansas (Hays)
42	"	KS87H65	"
43	"	KS87H66	"
44	"	KS87H67	"
45	H15A13333/3/5*Larned/Eagle//Sage/4/Dodge sib	KS87H264	"
46	Experimental Line	XW163	Pioneer
47	"	YW171	"
48	"	HBY261B	"
49	"	HBY756A	"
50	Bison	CI12518	Check
51	Experimental Line	HBY762A	Pioneer
52	"	HBY383A	"
53	"	HBY385D	"
54	"	HBY517A	"
55	"	W2439G	"
56	"	HBY262F	"
57	W79-227/Payne	NA-W84-229	NAPB
58	OK11252A/W79-1226	NA-W81-162	"
59	Payne/W78-069	NA-W83-256-W	"
60	Pawnee	CI11669	Check
61	II18889/Tpr//C0652643/3/Baca	Hawk	NAPB
62	SN/Tpr//Wrr/3/II18889/Tpr//C0652643	Mustang	"
63	Payne*2/C0725052	OK84286	Oklahoma
64	" "	OK84287	"
65	Hawk/OK80099	OK86197	"
66	OK79257/Century Sib/2/Chisholm	OK86215	"
67	TAM-106 resel./TX69D4819	TX84V1736	Texas
68	TAM-108/Arkan	TX86A7041	"
69	Rannaya/NE701136//CI13449/Ctk	TX86V1109	"
70	Concho	CI12517	Check
71	Rannaya/NE701136//CI13449/Ctk	TX86V1110	Texas
72	74cb452/Vona//Baca	C0830014	Colorado
73	Winter Wheat Line	RL844677	Rohm & Haas
74	Winter Wheat Line	RL845472	"
75	HRW Selection	AGC-112	Seed Research
76	" "	AGC-113	"
77	TAM W-101/W603//W558	XW161	Pioneer
78	Winter Wheat Hybrid	XH675	HybriTech
79	" "	XH685	"
80	Bison	CI12518	Check
81	" "	WH180001	Cargill
82	IL77-4259/IL76-3845	IL83-7439	Illinios
83	TX69A330/IL76-3820	IL80-1251	"
84	CHA Hybrid Mustang/3/T-105*4/Amigo*4//Largo, TXGH10287	TX87HA1	Texas
85	Rrr/FO.1527	ND8460	No. Dakota
86	(FTN/MI/Hope)//Pnc/2*Cnn/3/Pnc/3*Cnn/4/ Pnc/2*Cnn//ILL#1-Cns-TTi (CTMH)/ Sando60/5/Vona/6/Wrr*5/Agent//Kavkaz	NE83432	Nebraska
87	Winter Wheat Hybrid	XH947	Hybritech
88	" "	XNH1354	"
89	Hgl/ID5006/4/II-60-156/CI14107//It/3/ 2Cnn/PI178383	ID0301	Idaho
90	Pawnee	CI11669	Check

91	Winter Wheat Line	RH7846	Rohm & Haas
92	Agent/Tascosa//Sturdy	TX71D4876-V5	Texas (Dallas)
93	Amigo/TX71A106-5	TX82D4751	"
94	TX75D3165/Amigo	TX84D1265	"
95	Victory//Payne/Len	TX86D1305	"
96	Thunderbird//Norseman/Collin	TX86D1308	"
97	Thunderbird//Payne/Collin	TX86D1310	"
98	TX71C8130-R/Veery #4	TX86D1613	"
99	Concho	CI12517	Check

1988 SOILBORNE MOSAIC NURSERY
Disease Scores

Entry	Urbana, IL		Lincoln, NE		Manhattan, KS	
	Rep 1	Rep 2	Rep 1	Rep 2	Rep 1	Rep 2
	--- 0-9 ---		---- 0-5 ----		--- R-S ---	
1	7	6	3	3.5	S	S
2	6	3	3	4	S	S
3	5	4	3	2.5	R	R
4	5	5	4	4	MS	S
5	6	7	4	4	S	S
6	7	7	4	4	S	S
7	6	7	3.5	4	S	S
8	6	7	3.5	4	S	S
9	8	6	4	3.5	R	R
10	3	4	2	2.5	R	R
11	4	4	2	3	R	R
12	8	8	4	4	R	R
13	8	7	3	3.5	S	S
14	5	4	1	2	R	R
15	7	6	4	3.5	R	R
16	6	5	4	4	R	R
17	8	7	4	4	MS	S
18	7	7	4	4	S	S
19	6	6	4	4	S	S
20	6	6	3.5	3.5	S	MS
21	6	6	3	3.5	MS	MS
22	5	5	3.5	4	MS	MR
23	5	6	4	4	MS	MR
24	7	7	4	4	MR	MR
25	6	6	3.5	3.5	MR	MR
26	7	7	4	3.5	MS	MR
27	8	7	4	4	S	MS
28	6	8	4	3.5	R	R
29	7	7	3.5	3.5	R	R
30	7	7	3.5	3.5	MS	MR
31	7	7	3.5	3.5	R	R
32	7	7	3.5	3.5	R	R
33	7	7	4	4	R	MR
34	8	7	3.5	3.5	R	MR
35	8	8	3.5	3	R	MR
36	8	8	4	3.5	S	S
37	8	8	3.5	3.5	S	S
38	8	8	3.5	4	S	S
39	7	7	3.5	3.5	MR	R
40	4	2	2	1	R	R
41	6	7	3	3	MS	MS
42	6	7	3.5	3	R	R
43	4	6	3.5	3	R	R
44	5	6	3	3	R	R
45	6	4	2.5	2.5	R	R
46	4	4	3	2	R	R
47	4	3	1	2.5	R	R
48	3	2	1	2	MS	MS
49	4	2	1	2	S	S

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1988 Soilborne Mosaic Nursery

Entry	Urbana, IL		Lincoln, NE		Manhattan, KS	
	Rep 1	Rep 2	Rep 1	Rep 2	Rep 1	Rep 2
	--- 0-9 ---		---- 0-5 ----		--- R-S ---	
50	7	7	4	4	S	S
51	3	3	2	2.5	MR	R
52	3	2	2	2.5	R	R
53	3	2	1	2	R	R
54	6	5	4	4	S	S
55	5	3	2	3	MR	R
56	4	3	2.5	3	R	R
57	6	8	1	3	R	R
58	3	3	2	3	R	R
59	4	6	3.5	4	R	R
60	6	7	4	4	S	S
61	2	3	1	1.5	R	R
62	6	7	3	2	MR	MR
63	7	8	4	3.5	S	S
64	7	8	4	4	S	S
65	2	3	2.5	3	R	R
66	8	9	4	3	S	S
67	9	9	4	4	S	S
68	8	7	4	3.5	S	S
69	7	3	4	3.5	S	S
70	2	7	3	2	R	R
71	7	7	4	4	S	S
72	9	8	4	4	S	S
73	5	5	3	2	R	R
74	7	7	4	4	S	S
75	7	8	4	4	MS	MS
76	2	4	3	3	R	R
77	3	3	3	3	R	R
78	7	7	3	3	R	R
79	6	5	4	3.5	R	R
80	8	8	4	4	MS	S
81	5	8	3.5	3.5	MR	MS
82	6	6	4	4	MS	S
83	7	6	3.5	4	S	S
84	6	7	3	3	R	R
85	2	6	2.5	2	R	R
86	7	3	4	4	S	S
87	6	8	4	3.5	R	R
88	6	7	4	3.5	S	S
89	7	7	4	3.5	S	S
90	7	7	3.5	3.5	MS	S
91	4	4	2	1	R	R
92	7	7	4	4	S	S
93	9	9	4	4	S	S
94	8	8	4	4.5	S	S
95	4	5	3	2.5	R	R
96	-	-	2.5	3.5	R	R
97	7	6	2.5	2.5	R	R
98	-	7	4	4	S	S
99	4	4	3	2	R	R